

# More Adventures

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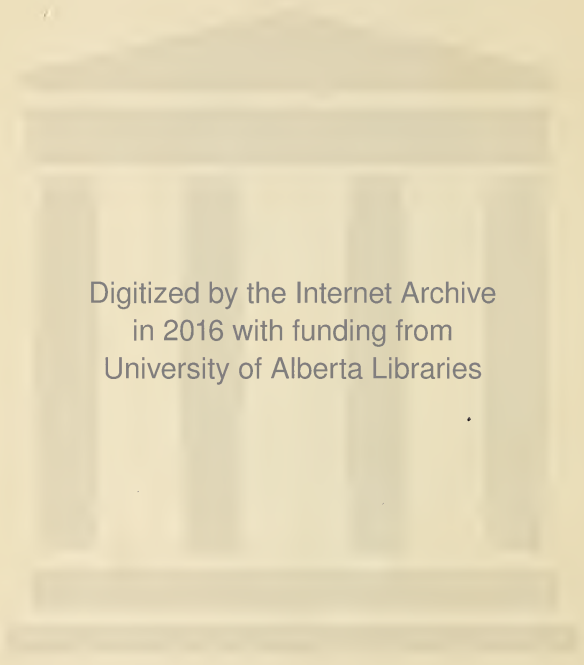
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By

ERNEST HORN

State University of Iowa

MAUDE McBROOM

State University of Iowa

KATHRYN SMITH

Public Schools, Kansas City, Missouri

ILLUSTRATIONS BY ARMSTRONG SPERRY

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## PREFACE FOR BOYS AND GIRLS

Have you ever stopped to think how many times in a day you read? When you get up in the morning, you may look at the paper to see what happened the day before. Perhaps you look through the paper to see what radio programs are on the air. Then, to get the program you want, you read the numbers on the dial and possibly the letters of the stations.

On the way to school, if you live in town, you read the signs in the store windows. And after you get to school, you will use books a great deal of the time. You may read in your health book, to find out how to keep from having a cold. To answer a question about the people in some far-away land you may read your geography. You may read an exciting story of adventures in the jungle. Almost everything you do in school requires some reading.

When you get home after school, you may find that you have a letter from a friend or from Grandmother. Of course you will want to read that.

After supper you may sit down to read a good story. Maybe one of your friends or one of your brothers or sisters will read with you.

There are stories in this book that you will read just for fun. There are other stories that tell you important facts that you want to know. But whether you read for fun or to answer some interesting question, you need to read well. This book was written to help you read better.

THE AUTHORS

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## Engato, The Lion Cub

This story of a lion cub who grew up in the wilds of Africa is true and exciting. It is taken from a book called *Engato: the Lion Cub*. You would enjoy reading the whole book.

### I. ENGATO ARRIVES LATE

I was wandering off the beaten track in Africa when I came upon a lion cub. It was so small that it could lie comfortably in the palm of my hand, and its eyes had not yet opened. I did not want my native helpers, or "boys," to kill it, and so I took it along with me.

Feeding the cub was a problem for the first few days. Finally a goat was found that would nurse it. In a few weeks a dozen goats were needed to give the cub enough milk. It was strange how careful the cub was not to scratch the goats with its claws, sharp, even at that age. But soon milk was not enough; so we gave it raw meat besides. Not long after that, meat became its only food.

This lion never had any name but Engato, which is the native name for lion. Engato stayed



Engato was so small he could lie





comfortably in the palm of my hand

with me for two years. During the whole time he never once had to be fastened up or to be punished. He never tried to bother a stranger.

As a cub he could only be called kittenish. He played just like a kitten, delighting to jump on my shoulder and to lick my hair, or to chew the heels of my shoes.

Engato early learned to climb the center poles that held up the roof of my mud house. That was the first time I knew that lions could climb. I came in one evening and found no cub at home. After a long search and after calling all my servants, I found him holding to the top of the pole, too frightened to try to come down.

Slowly the cub grew up. It became less kittenish. The spots on its fur went away and its



coat became rougher and less furry. It began to take more interest in the world about it and made friends with my dogs. It followed me on my long marches to other villages and even learned to answer a whistle, just as a dog might. Its play became rougher, but it never lost its kittenish gentleness and never once used its claws when at play. Only at feeding time did it want to be let alone. It soon became known to all the natives of that part of Africa and could wander through any village without upsetting the peace and quiet of the people.

But a day came when Engato had a new adventure. He showed both how smart he was and how hard it was to make him change his mind. I had to make a journey to a village ninety miles away. So off we set on the long march, Engato and my dogs following along quite cheerfully. All went well until I received a message telling me to hurry. The last forty miles had to be made in one day.

This was too much for Engato. He was used to going only fifteen or twenty miles a day, and he would not go another inch. It was not that

he was tired, but he was used to going just so far, and no coaxing would make him go a step farther. My boys were very much put out about it; so we left him there, some twenty miles from the village to which I was going, and hoped for the best. We told everyone along the way that Engato was about—for he was a stranger in these parts—and asked them not to bother him. And so I reached the village without Engato. Three evenings later he wandered into the village and walked up on the porch as if he were doing the most everyday thing in the world. He flopped with all his weight across my knees, looking up with a grin on his ugly face.

Of course we wanted to know how he had come and what he had been doing. I expected a large meat bill, as Engato had had to feed himself during those three days. He did kill what he needed to eat, but after all, we did not think two chickens and one sheep too much. The most interesting thing, however, was that though he came to us in the evening, he had reached the village in the morning. He had found a group of natives starting on a





journey along the road by which he had just come. Thinking that they were my boys, he had followed them after a short rest till they reached camp some fifteen miles away. Here he discovered that they were not my boys at all. Then this lion, who before would not go more than his usual fifteen miles, quickly turned back and returned to the village. In one day he had covered nearly fifty miles.

There are two questions I cannot answer : how did he find his way about a strange country, and how did he track me down without know-

ing where I was going? My boys, who were delighted to see him, said it was just luck. That is as good an answer as any.

### Can You Answer These Questions?

1. How did the lion look when he was found?
2. How did his master get food for him?
3. What does the name Engato mean?
4. How long did this man keep Engato?
5. What were some of his kittenish tricks?
6. Which of these tricks should you have liked most to see?
7. Why did Engato not stay with the men on the trip?
8. What mistake did Engato make when he was trying to find his master?
9. Why did Engato travel fifty miles the last day?
10. How did Engato show that he was glad to see his master?
11. How did the helpers, or boys, say that Engato was able to find his way to his master?



## II. ENGATO MAKES FRIENDS

Engato had many adventures during his time with me. One of the great days of his life was when he was little more than a cub. I was in camp, sleeping in a tent. Engato had just stopped sleeping on my bed and had begun sleeping under it with the dogs. Hardly had I put out my lamp one night when a large leopard entered the tent. It was after the dogs. Without waiting a moment, Engato leaped out. The leopard was so surprised that it turned and fled down the path. The cub bravely ran after it.

I had lighted my lamp before Engato returned; so I was able to see how proud he was. Words cannot tell how he walked back into the tent. He knew that he had done well. As he walked he pushed his shoulders forward as if to say: "So much for leopards! Trust me."

When Engato was still a cub, I took him and my Airedale dog, Ma, to a dance in another village. Ma was quite used to these entertainments, for he often went with me. He amused himself running round the villages and barking at the dancers. But this was to be Engato's first dance.

Engato had never been to this village before, and he always found new country exciting. He stopped to play hide-and-seek with the feathers of a bird that had been cooked and eaten by some boys under a fig tree along the path. He chased the feathers here, and he chased them there. They danced about in the breeze. Engato took no notice of the figs which I threw at him. Then Ma joined in the fun, and neither of them paid the least attention to me.

A sudden change of the wind brought the sound of drums to us from the dance. Now at

the sound of the drums the Airedale gave a quick run up the path before stopping to see whether or not I was coming. Engato lay shaking with fear, as close to the earth as he could get. So I picked up Engato and, placing him on my shoulder, followed the Airedale.

We arrived at the dance at a lucky time for Engato. The drums had stopped and the dancers were resting. They came crowding round the cub, who always loved to be admired. He was quite ready to be put down and to run about, scratching and nibbling their feet. The village dogs barked at him, of course, but that only brought Ma along to see if there were any chance of a fight. Disappointed in this, he took Engato along, and soon the two of them were off. They ran back and forth through the village quite happily. They sent children screaming to their mothers. They frightened the chickens and the goats till I had to call them off. They were getting too excited by all the new sights of a strange village.

There was an old man named Okelobong (ō kē lō'bōng) who lived in a village not far

from my house. He came to pay me a visit when I first brought Engato home. I can still see the old man placing his spear against my wall, spitting for luck as the natives do, and squatting down with a worried look on his wrinkled face.

He had heard of Engato, he said, and did I think I was doing the right thing in keeping him? After all, lions are dangerous things that do a lot of harm; they kill cattle and sometimes men and women.

And so he went on and on. But I was amused at seeing what Okelobong did not see. Engato himself had come round the corner and was quietly creeping up to the stranger. He was about six weeks old then and as playful as a kitten. He came up very slyly and then, with a sudden jump, which knocked down Okelobong's spear, landed on the old man's lap.

With a quick push of his hand Okelobong sent the cub rolling over and over. This did not worry Engato, who thought this quite a good game and well worth starting all over again. With a sudden twist he was on his feet again



and ready for the jump. But this time Okelobong saw him coming. Reaching for his spear, he said good-by and left my house. He took no notice of Engato, who followed him down the path, making short running jumps at his heels.

That, I thought, was the end of Okelobong's friendship, but I was wrong. He was back that afternoon with a couple of his younger children who, he said, wanted to see Engato. But that was just an excuse. He liked Engato's kittenish ways. He sat there on the grass and begged, really begged, Engato to come to him. Then very slyly he brought a piece of goat's meat out of his bag and asked if Engato would like it.

"Of course," I replied, "but don't forget that he will grow up to eat your cattle if you start him off on your goats at this age." He looked at me as if to say, "Can't you see that I was joking?"

So there he sat, rolling Engato about, tickling him under the ears, and rubbing his stomach. He was telling his children to be careful how they pulled Engato's very short tail, as it might hurt him if they were rough.





Oklobong begged, really begged,



Engato to come to him

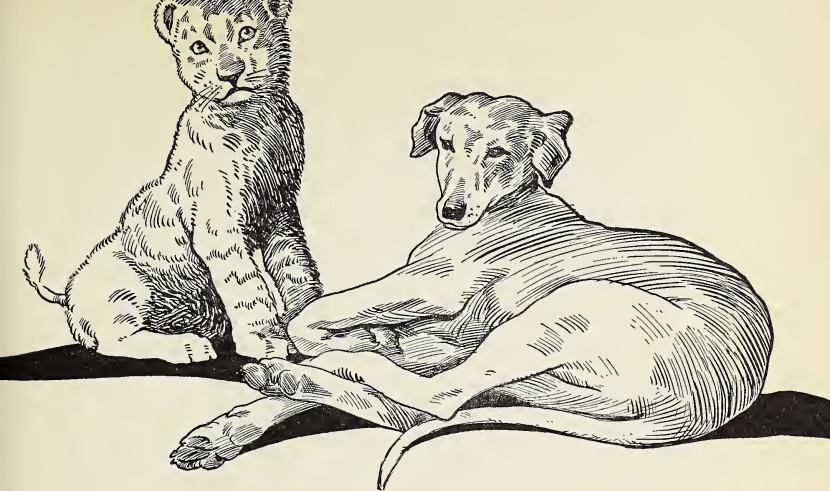


This was the beginning of a great friendship between Okelobong and Engato. One day Okelobong asked if he might take Engato to his village, as his people there would all like to see him and to play with him. So off they went together. Engato had such a good time that he became a regular visitor.

Now Okelobong had a hunting dog. It was an old dog, as African dogs go, and was known far around because it was so good a hunter.

Engato and the old dog became close friends. For some strange reason Engato at once made a hero of the old dog. The dog was no bigger than my Airedale and certainly did not look half so fine. But Engato at once liked him, and trotted after him as if the whole world lay in his new friend. They were friends at their first meeting. Even after Engato grew to be bigger than the old dog, he was almost a servant to him.

As time went on, the old dog walked less and less. He was feeling his age, and liked to lie in the sun, or, if it was raining, under a roof. If he walked, his speed was a crawl to Engato;



but Engato stayed with him. The two would lie in the sun together until the shadow of a hawk over the village caused Engato to chase it wildly. He would go quite mad and run round and round after the shadow trying to catch it. This is a trick which he learned from one of my Airedales. Then back he would go to the old dog, who sat grinning at his stunts.

The day came when the old dog died. He died of old age, and, like all good hunting dogs, he was buried where the cattle were pastured. Then his spirit would always be there to guard the village cattle against dangers.

Engato was unhappy. During the funeral he whined. For the rest of the afternoon he ran from corner to corner of the village looking everywhere for his friend. He tried all their old hiding places. He searched house after house, and paid no attention to the children who wanted to play with him as usual. He did not come home that night, but stayed in Okelobong's hut. The next day Okelobong said that Engato had kept him awake. All night long the lion cub had kept scratching at the door and pulling it open just to make sure that the old dog was not outside.

Engato was unhappy for three or four days, during which he could not eat properly. Then suddenly he seemed to forget, or he made up his mind that the old dog could not be found. And so he came home and started playing again in his own cheerful way.

### How Well Can You Tell a Story?

This second part of the story really tells four separate stories about Engato.

Find the four stories.

Make up a title for each story.

Choose which of these stories you like best and be ready to tell it in an interesting way.

Which story do you think is the funniest?

Which story shows how brave Engato was?

Which story shows his strong friendship?

### III. ENGATO LEAVES AFRICA

After a time, I had to say good-bye to Africa. I was sorry, for I did not want to leave Engato behind. What should I do with him? I could not take him home with me. I knew that his good friend, Okelobong, would try to look after him, but he was an old man and not likely to live long.

I could not turn Engato loose to look after himself. He did not know how to take care of himself and fight the battle for life. He would get into trouble and be killed.

There was only one thing to do. Engato would have to give up his life of freedom. In a crate he was loaded onto the steamer carrying me to Europe. When we reached land, I took Engato to a zoo where the keepers would be very kind to him and would give him a good



home. But it was not much fun leaving him shut up alone in a cage in a strange land.

Five years later I called again at the zoo. The keeper and I went behind Engato's cage so that he should not see us coming. The cage door was thrown open. I whistled the old call, and he whirled around at once. In a second he was across the cage, flinging his paws on my shoulders as he used to do. The only difference was his weight. He nearly licked my ears off



in his excitement. As he tugged at my shoulders, his tail kept thumping and sweeping across the floor.

It was hard to leave him again. I had not imagined that he would remember me so well or show his pleasure so much. I almost wished that I had not gone to see him.

The keeper told me that Engato was the gentlest lion he had ever known. He was the only lion that could be trusted to walk in the gardens.

I really believe that Engato was happy. He certainly looked well.

*J. H. Driberg*

### Do You Know the Answers to These Questions?

1. Why could Engato not be left in Africa?
2. What seemed to be the best place to leave him?
3. How long was it before Engato saw his master again?
4. How did Engato greet his master?
5. What things made his master think that Engato was happy at the zoo?

# Learning to Outline

## I. RULES ABOUT EATING

Here are nine rules about eating. Each rule tells about one of three things. It tells you *what to eat*, *how to eat*, or *when to eat*. As you read each rule, find whether it tells *what to eat*, *how to eat*, or *when to eat*.

1. Eat slowly so that you chew your food well.
2. Eat at about the same times every day.
3. Eat plenty of hard foods, such as toast, apples, and baked-potato skins.
4. Eat some leafy vegetable every day.
5. Have your hands clean when you eat.
6. Do not eat between meals.
7. Do not eat too much sugar.
8. Every day eat some such fruit as oranges, apples, figs, or prunes.
9. Do not wash your food down with water or milk.

## Can You Group These Rules?

1. Write the numbers of the rules which tell you what to eat.
2. Write the numbers of the rules which tell you how to eat.
3. Write the numbers of the rules which tell you when to eat.

## II. HOW TO MAKE AN OUTLINE

The rules which you have just read tell about these three things :

- I. What to eat
- II. How to eat
- III. When to eat

The words beside I, II, and III are called subjects or topics. Read the rules which are about *What to eat*. There are four of them. Here is one way to show that there are four sentences about topic I :

- I. *What to eat*
  - A.
  - B.
  - C.
  - D.

*A*, *B*, *C*, and *D* mean that there are four sentences which tell about *What to eat*. Find one of the sentences. Call it *A*.

Find another sentence. Call it *B*.

Find another. Call it *C*.

Find another. Call it *D*.

Read the sentences that are about *How to eat*. There are three of them. Here is one way to show that there are three sentences about topic II :

II. *How to eat*

*A*.

*B*.

*C*.

*A*, *B*, and *C* mean that there are three sentences about *How to eat*. Which sentence will be *A*? Which one will be *B*? Which one will be *C*?

Read the sentences that are about *When to eat*. There are two of them. Here is one way to show that there are two sentences about topic III :

III. *When to eat*

*A*.

*B*.

*A* and *B* mean that there are two sentences which tell about *When to eat*.

You have been making an outline of what you have read. When the parts of the outline are put together, the whole should be written like this :

I. *What to eat*

A.

B.

C.

D.

II. *How to eat*

A.

B.

C.

III. *When to eat*

A.

B.

**Filling in the Outline**

Copy this outline on paper and fill in the rules that go with each letter. *Do not write in this book.*



Pioneer women usually made their soap in the spring



## Making Soap in Pioneer Days

### I. QUESTIONS TO HELP YOU STUDY

Pioneers are persons who open a way for others to follow. When we speak of pioneer days, we usually mean the times when people were moving into new parts of a country, where there was forest to be cleared or prairie to be plowed in order to make farms. The men and women who first came to live in America were pioneers. We say that they were the first settlers. The first settlers on the plains were pioneers, and so were the people who first settled in California. Life is never easy for a pioneer. He has to do without many things that make living pleasant, and he has to think up new ways of doing things to fit the new country to which he has journeyed.

This lesson tells how the pioneers made soap. Perhaps you already have learned some things about making soap in pioneer days. The four questions that follow will help you to decide what things you already know, and what things you need to learn, about soapmaking:

1. Why did the pioneers buy very little soap?
2. From what did the pioneers make their soap?
3. Where did the pioneers get the materials which they used in making soap?
4. How did the pioneers make their soap?

Read the lesson so that you will be able to answer all four questions.

## II. HOW SOAP WAS MADE

If your hands are very dirty, you need to use soap for washing them. Today you can buy soap very easily. A store will sell you a cake of soap for five or ten cents.

When our great-grandfathers and great-grandmothers were children, it was not so easy to get soap. Many pioneer families lived miles from the nearest store. Many of the stores had no soap to sell. Besides, the soap which the stores sold cost a great deal, and most of the people had very little money.

How do you suppose these pioneers got their soap if they did not buy it? They made it.

First they had to make a liquid called lye.



They bored a hole in the bottom of a large barrel, near its edge. The barrel was then placed on a bench or a stone. In the bottom of the barrel they placed a layer of clean, fresh straw. On top of this straw they heaped wood ashes until the barrel was full.

For many months the pioneers had been saving ashes from the big fireplace. They were very careful to save the ashes from maple, walnut, and hickory logs because ashes from these logs make the strongest lye.

After the ashes had been placed in the barrel, buckets of water were poured over them. A clear, brown liquid began to drip through the ashes and straw. This liquid was the lye needed to help make the soap. A bucket, placed under the hole in the barrel, caught the slowly dripping lye.

Now the lye was tested for strength by putting a fresh egg into it. If the egg floated, the lye was strong enough to use in making soap. If the egg did not float, the lye was not strong enough and was poured back into the barrel and allowed to soak through the ashes again to make it stronger. Once in a while it was necessary to use a fresh lot of ashes.

The people were careful not to put their hands into this lye. It was so strong that it would take the skin off. Mothers watched the children carefully to keep them from touching the lye.

When the lye was ready, it was poured into a big iron kettle. To the lye was added grease. Pioneer women saved scraps of fat and little pieces of candle to make the grease. A fire was

built under the kettle. Then the kettleful of lye and grease began to boil. Soon the liquid in the kettle became thicker. It had to be stirred all the time to keep it from boiling over. When the liquid had cooked until it was about as thick as molasses, it was ready to be taken off the fire. It was then soap.

The soap was dipped from the big kettle into buckets. It was poured from these buckets into a barrel or into large jars, and left to cool.

It was called soft soap because, even when the soap was cold, it usually was not hard like the soap we use now.

If a woman worked hard, she could make a barrel of soap in a day or in even less time. She was always very glad when the soap was made for another year.

Pioneer women usually made their soap in the spring. By spring enough grease and ashes had been saved to make enough soap to last the rest of the year. Besides, at that time of year, the soap could be made outdoors. In that way the odor of the boiling soap was kept out of the house.

Although making soap was hard work, the pioneer mother was willing to do it. It was a good way to make use of grease, scraps of fat, and little pieces of candles so that they would not be wasted. In this way her soap did not cost any money. Besides, many women liked the homemade soap better than the soap which was then sold at the stores.

The mother used this soft soap to wash the clothes and the dishes. All the family used it to wash their hands and faces. A big bowlful of it was brought from the soap barrel and kept handy in the kitchen.

### How Well Did You Read?

Here are two exercises to test how well you have read the lesson "Making Soap in Pioneer Days."

#### *I. Did You Read Carefully Enough to Answer These Questions?*

1. For what reasons did many pioneers make their own soap?
2. From what did the pioneers make their soap?



3. How did the pioneers get lye?
4. How could they tell when the lye was strong enough?
5. How did the pioneers get the ashes that they used in making lye?
6. What kinds of wood ashes were best for lye?
7. Where did the pioneer women get the grease used in making soap?
8. About how thick was the liquid in the kettle when it had cooked long enough?
9. If a woman worked hard, about how long would it take her to make a barrel of soap?
10. Why did the pioneer women usually make soap in the spring?
11. Why did they need to handle the lye carefully?
12. Why were the pioneer women willing to do the hard work of making soap?
13. In what ways was this soap different from most of our soap?
14. Now that you know how soft soap is made, can you think of a reason why some meat-packing houses make soap?

## II. *Can You Arrange Steps in Their Right Order?*

Here are nine steps in making soft soap. They are not in their right order. Number your paper from 1 to 9. After number 1 write the letter that stands before the first step in making soap. After number 2 write the letter that stands before the second step, and so on, until all the steps have been placed in order.

- a. Put straw in the bottom of the barrel.
- b. Put grease and lye into the kettle.
- c. Pour water into the barrel.
- d. Test the lye with an egg.
- e. Stir the liquid while it boils.
- f. Put ashes into the barrel.
- g. Bore a hole in the barrel.
- h. Save ashes and grease.
- i. Let the soap cool.

## Using the Contents

Turn to the Contents in the front of this book. The Contents lists the titles of lessons in the order in which they come.

See how quickly you can find the lessons described below. Give the name of each lesson and the number of the page on which it begins.

1. A lesson about public property.
2. A lesson about a very large animal.
3. A lesson about a plant that poisons people.
4. A lesson about the thermometer.
5. A lesson that tells about birds.
6. A lesson that teaches you how to remember things you read.
7. A lesson about odd ways of telling time.
8. A story about a lion cub.
9. A lesson about making soap.
10. A lesson that tells about bats.
11. A lesson that tells how to use an index.
12. A story about a boy who was lost in the jungle.
13. A lesson that tells how to read a graph.
14. A lesson about Roman numerals.



The "Windward" and all the people on it were prisoners for the winter

## The Snowbaby's Own Story<sup>1</sup>

Marie Ahnighito Peary (ma rē' ä nĭgē'tō pēr'ī) is the daughter of Rear Admiral Robert E. Peary, the great American explorer who was the first man ever to reach the north pole. She was born in Greenland on one of her father's trips, and returned there several times during her childhood. She has written a book called *The Snowbaby's Own Story* that is full of the stories of her exciting life in the Far North. The following stories tell of adventures she had one winter when the ship, the *Windward*, became frozen in the ice.

Admiral Peary had been in Greenland during the year before these adventures took place. With the coming of summer, Marie Ahnighito and her mother had sailed in the *Windward* to bring him back to the United States.

Before the *Windward* reached Admiral Peary, a storm almost wrecked it in a small harbor on the coast of northern Greenland. The storm left a huge iceberg in the very center of the narrow lane leading out of the harbor. Each day the captain had expected to see it float away, but it did not move. The water on each side of it was too shallow to let the ship squeeze through. The *Windward* and all the people on it were prisoners for the winter.

<sup>1</sup> Reprinted and adapted from *The Snowbaby's Own Story*, by Marie A. Peary. Copyright, 1934, Frederick A. Stokes Company.



## I. A WILD RIDE

Soon the water in the harbor froze over, and the ship was locked in the ice. We had plenty of food, but nothing fancy of course. Mother knew that the Eskimo men would keep us in fresh meat, even if it were only arctic hare. When the hunting started and there were skins enough, the Eskimo women would be able to make winter clothes for us all.

I had plenty to eat, a warm, comfortable place to live, warm clothing to wear, and the Eskimo children with whom to play. There began, then, one of the happiest winters I can remember.

It started with my birthday, the twelfth of September. Mother gave me a party on the ship. There was a cake with seven candles. There were even presents. Soon after my birthday, the sun left us and the long arctic winter began.

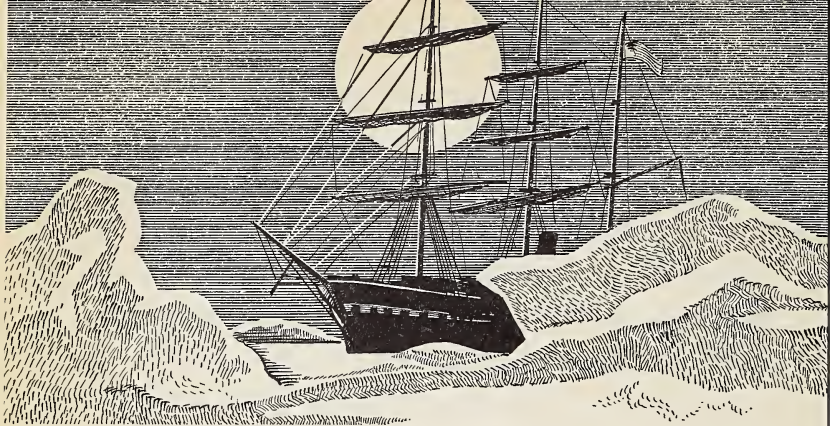
One of my great joys that winter was playing with the Eskimo children. Koodlooktoo (kōōd-look'tōō), my best friend since baby days, did not often play with us now, for he had a job.

This job was to learn to drive a team of dogs. It was not easy. In fact, not many white men ever learn to drive dogs as well as the Eskimos do it.

The Eskimos of northern Greenland hitch their dogs to the sled in a sort of fan shape, spread out like the fingers of a hand. There are no reins to guide the dogs. They are directed by their master's voice and sometimes by his whip.

In order to handle his whip, the Eskimo must practice and practice. A good driver can whirl his whip about his head and bring the tip of it down exactly where he wishes. The whip does not hurt; it simply reminds some lazy dog that he is not pulling his share. The driver uses his whip with all his strength only in breaking up dog fights.

For weeks Koodlooktoo had been practicing with his whip and I had been watching him. He pretended that lumps of snow were a dog team. Then, swinging his whip over his head, he would see how often he could strike the "dog" he wanted to hit.



We always tried to plan some special trip for full-moon time, because there was so much more light that we could go farther from the ship. So one day, when there was a moon, Koodlooktoo appeared at the ship bursting with excitement. He asked Mother if he might take me for a ride on his sled. He had never yet tried driving a real team, but his quiet way of asking put Mother off her guard, and she let me go.

That ride was one of the most exciting adventures we ever had together. Off we started over the sea ice. I was seated comfortably on the sled, and Koodlooktoo was running behind, with his hand resting lightly on it.

The dogs behaved beautifully. When Koodlooktoo snapped his whip and called "Achook (ä chōōk')! Achook!" the team would swing to the right. When he called "Howah (hou'ä)! Howah!" they turned to the left. And when they showed signs of slowing down a little, it needed only a few words of kindness or the sound of the whip tapping against Koodlooktoo's boots to start them forward again at top speed.

The ice was so smooth and the dogs were pulling so well that Koodlooktoo decided he could risk riding for a while himself. So he jumped onto the sled in front of me, and we





dashed along at fine speed. I was really enjoying myself when the dog to the left took it into his head to jump across the traces and pull on the right side of the team for a while.

Of course Koodlooktoo could not allow that. He swung his whip to tap the disobedient dog on the ear and send him back to his place. But the whip never reached the dog. Instead, it came back and wound itself tightly about my neck.

To say that I was startled is putting it mildly. Thanks to my thick foxskin coat and hood, I was not at all hurt. However, poor Koodlooktoo was so ashamed! He carefully unwound the whip and tried again. He wanted to show



me that the first time was only an accident that might have happened to anyone. But as luck would have it, he did exactly the same thing the second time. It was too awful. I did feel sorry for him.

In his rage and shame he jumped off the sled. Just at that moment the team crossed a fresh fox track! We had been going pretty fast ever since we left the ship, but we saw that was nothing to what the dogs could do if they were really interested! We simply flew along! It was all I could do to stay on the sled. And Koodlooktoo, yelling and waving his whip, was left far behind us.

Wild with excitement, the dogs used no care in picking their road. One minute the sled would be splashing through a puddle of water. The next minute it would swing against a hump of ice with such a blow that I wonder we were not smashed to bits—dogs, sled, and I.

There was no telling how long the chase would last, and I made up my mind not to stay and find out. If the sled upset, it would be no fun being dragged along beneath it.

I waited until we were skimming across a fairly level strip of ice, where the snow at least looked soft. Then I ducked my head, curled up as much like a ball as possible, and rolled off the sled.

I was hardly on my feet when Koodlooktoo arrived. He was all out of breath and worried for fear I was hurt. I saw that he was also worried for fear I should want to return to the ship right away. That would have let him in for such a teasing! Life would not have been worth living for weeks to come! Nothing can make an Eskimo man more ashamed than to let his team get away from him.

Koodlooktoo did not mention this to me, but I guessed his feelings. He was surely pleased when I told him I would wait while he caught his dogs.

And catch them he did, in no time at all. They behaved like lambs all the way back to the ship. It was a long time before anyone heard the true story of our wild ride across the ice.

## II. AN ADVENTURE DURING THE LONG WINTER NIGHT

The winter days passed slowly. It was at the first full moon after Christmas that Koodlooktoo and I had one of our most thrilling adventures. It was the first time that he really saved my life, but it was by no means the last time.

The moon was full; so we decided to walk across the frozen ice of the bay to a hill on a point of land about four miles to the north. Mother gave us some crackers and chocolate to take along. The captain made us feel very important by asking us to climb the hill and report to him how the ice was beyond it. He said that



it would help him to judge how soon the ice in our bay might start breaking up.

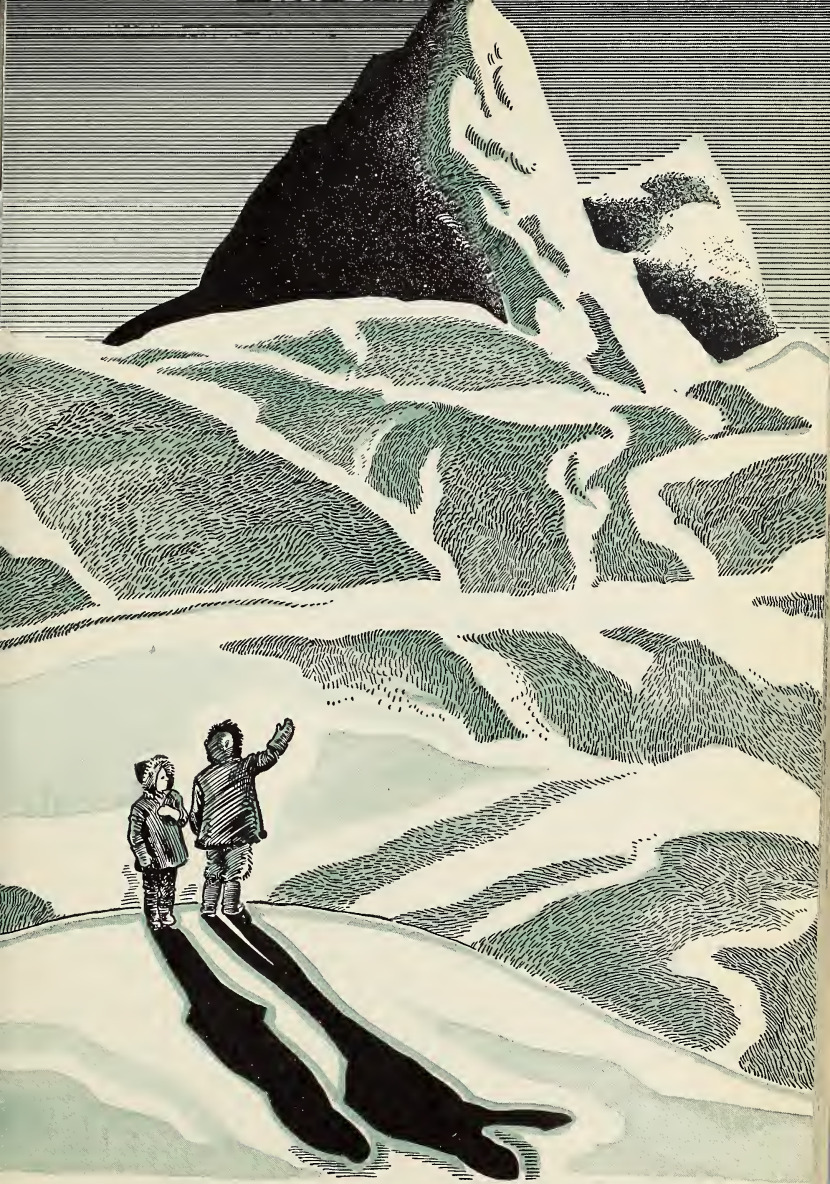
We reached the hill without any trouble, but it was farther to walk than it had looked from the ship. We ate our lunch under the shelter of some big rocks and then climbed up to get a good view to the north. As far as we could see, there was ice. There was no open water to be seen, not even a large crack.

But when we turned to look back over the way we had come, an unpleasant surprise awaited us. The wind had broken up a wide lane in the ice. While the ship was still held in its icy prison, there was a mile-wide stretch of black water between us and the ship.

I looked at Koodlooktoo. He shook his head sadly and said that there was nothing to do but to return to the ship by going on land around the bay.

This meant a walk of about twenty miles. We started off bravely enough. It was a pretty stiff job, however. Up, up we would climb to the top of a hill and then down into the valley beyond. Then we would find ourselves faced







with another hill, higher than the last. When that was climbed, we could see another one ahead of us and another and another. It seemed to me that every hill and mountain that I had ever read about had been placed between us and the ship.

The walking was terrible and very different from that on the sea ice of the bay, which had been cleared of snow by the wind. Sometimes we would suddenly sink into soft snow up to our waists. Again the ground would be covered with only a thin covering of snow, and we would step on sharp rocks.

Several times I gave up. I begged Koodlooktoo to let me rest while he went to the ship for help. But he knew that that would be the worst thing in the world to do.

At last, from the top of a hill, we could see the lights of the *Windward* shining below us. Best of all, from our very feet, down almost to the ship, stretched a wonderful, smooth snow slope. I was delighted, and prepared at once to slide down in comfort. But Koodlooktoo stopped me. The snow slope might be full of

deep cracks. Worse still, it might end in a sharp cliff above the water. It was too dangerous to try.

By that time, however, I was too tired to care whether or not it was dangerous. One thing was clear to me; I was not going to take one more step than was necessary. Koodlook-too could walk on around if he wanted to. I was going to sit down and slide!

Koodlooktoo gave up and sat down beside me. Off we started. It was wonderful to be carried nearer home every second.

After a while I noticed something that did not please me quite so well. The snow all around us had started to slide. Faster I went and faster. I dug my heels into the snow and tried to stop, but it was no use. I threw myself backward with my arms stretched out, but that did not help either.

Then suddenly I saw the snow slope end in a cliff and, far beneath it, black water. My heart was in my mouth. The cliff was not a very high one, but it would be a long way to fall, especially if the fall ended in icy water.

Just then a black fur bundle, clawing and kicking like an animal, whizzed past my head. It was Koodlooktoo. He rolled almost to the edge of the cliff. Suddenly he stopped. He had found firm footing. Then, as my private snowslide and I passed him, he shot out his arm and dragged me to safety beside him.

At first we hardly dared to breathe for fear of starting another snowslide. Then little by little, an inch at a time, we worked ourselves over on to firmer snow and then down the side of the cliff. Over the sea ice we returned to the ship.

As we sat drinking cups of the steaming cocoa that was waiting for us, I said: "Koodlooktoo, how did you know that you could stop so near the edge of the cliff? The snow there didn't look any different to me from the rest of the snow."

He gave me the strangest look as he answered: "I did not know, of course. I only knew that I must try to save Ahnighito if I could."

*Marie A. Peary*



### After Reading, Can You Tell the Story?

This is an exciting story to tell to your friends or your parents. The following questions will help you to choose the most exciting parts of the story :

1. What time did the children choose to take a tramp ?
2. Where did they decide to go ?
3. Where did they eat their lunch ?
4. Why could the children not go back the way they came ?
5. How far back was the trip by land ?
6. What things made walking very difficult on the way back ?
7. Why was it dangerous to try to slide down the steep slope of the snow ?
8. After they started sliding, what danger did the children see ?
9. How did Koodlooktoo save Ahnighito ?
10. Did the children reach the ship at last ?



## Words Out of Place

In each of the following lists there is one word that does not belong with the other words in that list. Find the word. Tell why you chose that word.

Which word should you choose from this list?

rose · oak · poppy · pansy · tulip

*Oak* is the word that does not belong with the others. *Oak* is the name of a tree. The other words are names of flowers.

1. lion · tiger · salmon · elephant · camel
2. wheat · grapes · rye · corn · oats
3. ceiling · floor · sidewalk · door · wall
4. airplane · ship · train · horses · automobile
5. iron · copper · lead · silver · silk
6. kitten · puppy · horse · colt · lamb
7. silk · wool · cotton · shoes · linen
8. chair · bookcase · table · bed · boy
9. pen · ink · paper · tea · blotter
10. fly · mosquito · moth · gnat · mouse
11. rain · summer · snow · hail · sleet
12. arms · eyes · nose · chin · mouth
13. peas · beans · potatoes · pork · corn

- 14. building · brick · stone · clay · wood
- 15. doctor · carpenter · teacher · typewriter · lawyer
- 16. summer · winter · spring · storm · autumn
- 17. bridge · house · store · garage · hospital
- 18. cup · glass · pan · plate · saucer
- 19. river · mountain · ocean · sea · lake
- 20. newspaper · magazine · pencil · book · letter
- 21. piano · violin · horn · drum · music
- 22. refrigerator · stove · sink · davenport ·  
cupboard
- 23. gasoline · coal · iron · oil · gas
- 24. Chicago · Texas · Boston · Los Angeles ·  
Cleveland
- 25. pork · beef · mutton · veal · hog
- 26. apples · turnips · oranges · grapes · peaches
- 27. swimming · skating · baseball · tennis · singing
- 28. robin · hawk · sparrow · oriole · fly
- 29. hammer · saw · screwdriver · nails · carpenter
- 30. bread · milk · tea · coffee · water

## Strange Ways of Telling Time

Have you ever wished to know the time of day when you were far from a clock or a watch of any kind? Perhaps you tried to find out what time it was by looking at the sun. But the sun does not shine every day.

Have you ever wondered how people of long ago told time? They did not have clocks like ours. If you read this story carefully, you will find four ways in which people of long ago told time.

Years and years ago people did not tell time as we do now. They did not divide the time into hours. They measured the time in days. They watched the sun and told by the number of times it rose and set how many days had passed. Instead of saying, "It is three days since we caught the bear," they would say, "It is three suns since we caught the bear."

After a while some men found ways of telling the hours. Far away, in a country called Egypt, they used what was known as a water clock. A big brass bowl was placed in a pool

of water. In the bottom of the bowl was a tiny hole. The bowl floated on the water. The water slowly came in through the tiny hole. Lower and lower the bowl sank as the water rose in it. When the bowl was full to the very top, the people knew that an hour had gone by, for they had found out that it took just one hour for the water to fill the bowl.

Every time the bowl was filled, a man struck a gong that hung on the branch of a tree above the pool. When the bowl had filled the first time, showing that one hour had gone by, the man struck the gong once. That meant that it was one hour since sunrise. When the second hour had passed, he struck the gong twice. Six strokes on the gong meant that six hours had passed since sunrise.

Another way of telling the hours was by the hourglass. The hourglass was divided into two parts, with a tiny opening between the parts. In one part was sand. When this part of the glass was on top, the sand would run slowly down into the lower part. When the sand was all gone from the top part, an hour had gone by.







Then the glass was turned upside down and the sand ran back into the other part to show the passing of another hour.

Sometimes the preacher used an hourglass when he preached his sermon. He would preach until all the sand had run out of the top of the glass. How the little children would sigh if he turned the glass over and went on with his sermon! Two hours is a long time to sit still.

Long ago in England, in the time of King Alfred the Great, candles were used to tell time. Each candle was divided into twelve parts by

colors or by notches. People knew just how long it took for the candle to burn down to a notch or to a new color. When three parts of the candle had burned down, an hour had passed by. Each candle lasted four hours. Six candles would last from one sunrise until the next.

The king noticed that the wind made his candles burn too fast; so he put a covering, made from the horn of an animal, around them. Because the light shone through the horn, people called these covered candles *lanthorns*.

Many strange ways of telling time were used before we had clocks and watches. Perhaps you have heard of other ways not mentioned in this lesson.

### Can You Find Subtopics?

The main topic of this lesson is its title, *Strange ways of telling time*. It has four subtopics, each of which tells one strange way of telling time. Write the main topic and the subtopics in outline form.

## Finding Names in the Telephone Book

Have you ever called anyone over the telephone? Did you know the telephone number or did you have to look it up in the telephone book? Did it take you a long time to find a name in the telephone book? How did you know just where in the book to look for the name you wished to find? This lesson will help you to learn how to use the telephone book.

What is the first letter in the alphabet? Look at the list of names at the bottom of this page. Find in the list a person's name that begins with *A*. Write the name on your paper.

What is the second letter in the alphabet? Find a name beginning with *B*. Write it below the name beginning with *A*. Find a name beginning with *C*. Write it next.

Smith	Brown	Jones	White
Anderson	Cox	Zink	Ingram
Unger	Young	Flinn	Ralls
Edwards	Voss	Olds	Thayer
Goldsmith	Hall	Lang	Neal
Piper	King	Drum	Mann
	Quinn	Xeres	





Find a name beginning with *D*, with *E*, and so on to the end of the alphabet. Write the names in order. Is there a name for every letter?

You have now written all the names in the way the letters come in the alphabet. This is called arranging the names in alphabetical order. The names in the telephone book are arranged in alphabetical order, with the person's last name first. Words in an index and in a dictionary are also arranged in alphabetical order.

In this lesson there is only one name beginning with *A*. In the telephone book there are a great many names beginning with *A*. There are a great many names beginning with *B*, with *C*, and with most of the other letters.

In the list of names you have just written see how quickly you can find the name beginning with *D*.

Find the name beginning with *W*. Is it near the beginning of your list or near the end?

Can you find the name beginning with *K*? Is it near the beginning of the list?

Put your finger on the name beginning with *C*. Near what part of your list is that name?



Find the name beginning with *L*.

Near what part of the list should you find a name beginning with *S*?

What names are nearest the middle of your list? What names are near the end of your list?

Find the name beginning with *F*.

Ashton J W r 36 Golfview . . . . .	6307
Athens Press 211 Iowa av . . . . .	2660
Aune Arthur r 38 Highland dr . . . . .	2730
Aurner C Ray r 303 Lexington av . . . . .	2596
Austin H G r 418 N Gilbert . . . . .	3465
Auto Supply The 104 S Linn . . . . .	2330
Avenue Grocery 615 Iowa av . . . . .	2514
Axen Mayme Mrs r 322 N Van Buren . . . . .	3846
Ayers C Mrs r 818 Rundell . . . . .	6570

Above is a list of names taken from a telephone book. Each of these names begins with *A*. When all names begin with the same letter, the second letter is used in arranging the words in alphabetical order.

The first name, *Ashton*, starts with *As*. In the alphabet, the letter *s* comes before *t*. Therefore the name *Ashton* comes before *Athens Press*, which starts with *At*.

There are four names in this list beginning with *Au*. When the first two letters of names are alike, the third letters are used to arrange

them in alphabetical order. *Austin* comes before *Auto* in the list because *s* comes before *t* in the alphabet.

Jones Anna A r 122 E Court	9428
Jones A R r 314 E Church	6227
Jones Arthur r Coralville	4790
Jones C G r 822 Newton rd	9378
Jones Dean r 907 E Davenport	3950
Jones Dick r 107 Grove	3867
Jones Donald farm RFD 1	6032
Jones E J r Coralville	4790
Jones Fred A r 515½ E College	5668
Jones Fred L r 1132 Kirkwood ct	3350
Jones Guy r 314 E Burlington	5541
Jones Ilion T Rev r 609 S Summit	6885
Jones Jack r 1012 Newton rd	6584
Jones James W r 701 Melrose	6749
Jones J W r 620 E Burlington	5284
Jones Lewis C r 320 N Johnson	5522
Jones Lonzo Dean r 714 N Johnson	6653
Jones M A H Dr ofc 111½ E Washington	4614
Jones M A H Dr r 120 E Davenport	3682
Jones Manley P r 715 N Van Buren	5948
Jones Nettie r 531 S Van Buren	4573
Jones Nyle W r 30 S Governor	3415

In the above list of names taken from a telephone book, all the last names are *Jones*. In such a case, each person's first name is used in arranging the list in alphabetical order. Notice that the persons' names whose first names begin with *A* are at the top of the list.

There are two persons named Fred Jones. When both first names and last names are the same, middle initials are used to decide the

order in a list. *Jones Fred A* comes before *Jones Fred L* because *a* comes before *l* in the alphabet.

### Can You Tell Why?

1. *Jones Jack* comes before *Jones James W*?
2. *Jones Lewis C* comes before *Jones Lonzo Dean*?
3. *Jones Nettie* comes before *Jones Nyle W*?
4. *Jones Dean* comes before *Jones Dick*?

### Can You Arrange Names in Alphabetical Order?

Number your paper from 1 to 8. After number 1 write the name from the list below that should come first in an alphabetical list. After number 2 write the name that should come next. Then complete your list, putting each name in correct alphabetical order. Remember to look at the middle initial when the first and last names are the same.

Nelson Arthur R

Nelson Lewis C

Nelson Dorothy G

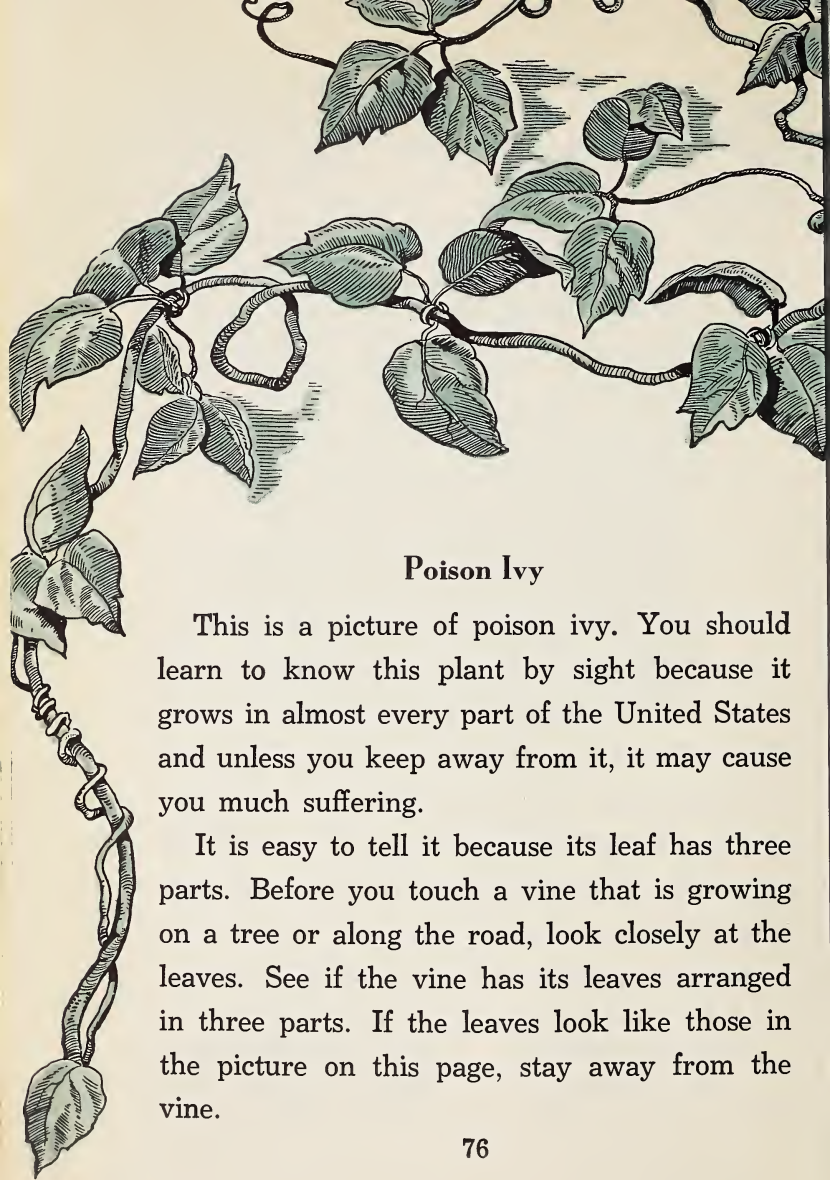
Nelson William J

Nelson Nick

Nelson Arthur P

Nelson William H

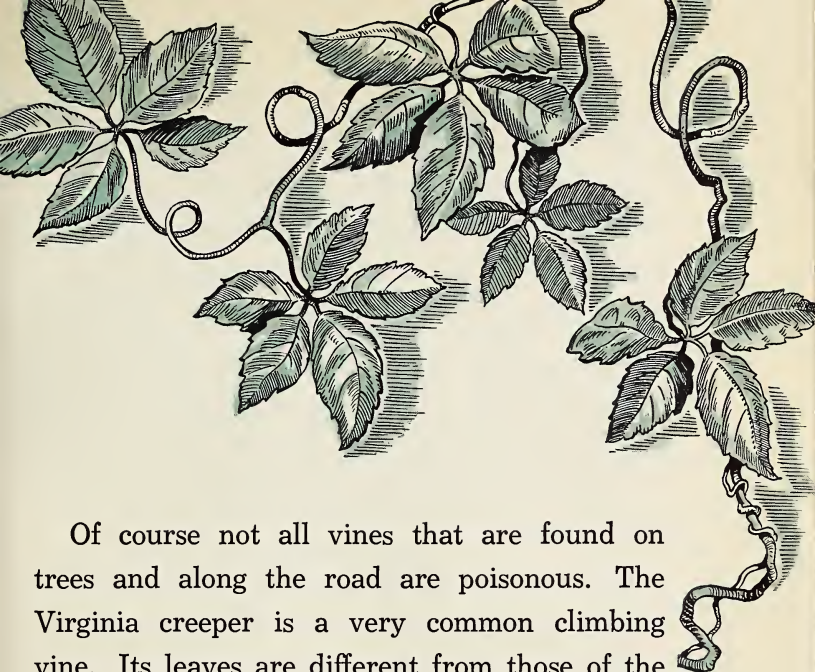
Nelson Walter L



## Poison Ivy

This is a picture of poison ivy. You should learn to know this plant by sight because it grows in almost every part of the United States and unless you keep away from it, it may cause you much suffering.

It is easy to tell it because its leaf has three parts. Before you touch a vine that is growing on a tree or along the road, look closely at the leaves. See if the vine has its leaves arranged in three parts. If the leaves look like those in the picture on this page, stay away from the vine.



Of course not all vines that are found on trees and along the road are poisonous. The Virginia creeper is a very common climbing vine. Its leaves are different from those of the poison ivy. The leaves of the Virginia creeper have five parts, while those of the poison ivy have only three. A picture of the Virginia creeper is shown above.

The poison of the poison-ivy plant is a very strong oil that sticks to your skin if you touch the plant or get near it. This oil, if left on your skin, will cause blisters to form. The parts of your body that are poisoned will swell. If your face is poisoned, your eyelids may swell shut.



Ivy poisoning causes great pain and is sometimes very dangerous. Some people are more easily poisoned by this plant than are others. A few seem to be able to handle it in safety. Others cannot go near it without being poisoned.

You are more likely to be poisoned when you are very warm than when you are cool. When you are perspiring, the pores, or tiny openings in your skin, are open. The poisonous oil from the plant can easily get into the open pores.

One way to protect ourselves against poison ivy is to kill all poison-ivy plants that grow in yards or in other places where people are likely to touch them. Someone who is not easily poisoned should put on leather gloves and pull the plants up by the roots. Or the plants may be killed by cutting them off at the roots and pouring something on the roots which will kill them. Oil such as is used in automobiles will kill the poison-ivy plants.

Whenever you have been near poison ivy, it is a good plan to bathe thoroughly with laundry soap. If, by accident, any part of your

body has touched poison ivy, wash that part several times with strong laundry soap. The strong soap takes off the oil of the poison ivy. Toilet soap will not do, as it will not take off enough of the oil.

If some part of your body begins to burn and swell after you have been in the woods, or if blisters begin to form on some part of your skin, you may have been poisoned by ivy. Then it is best to go to a doctor. He will help you to get well the quickest way.

After the blisters have formed you are likely to suffer a great deal in spite of all the doctor can do for you. It is easy to see that the wisest thing for anyone to do is to keep from being poisoned.

### **Practice in Remembering**

It is important that you should remember what this lesson tells you because it may sometime save you suffering.

You will not remember the lesson if you read it only once. The best way to remember any lesson is to think over what you have read

and to choose the main points that you want to remember. Following are the nine main points in the lesson about poison ivy :

1. Why you should learn to know poison ivy.
2. How you can recognize poison ivy.
3. How you can tell poison ivy from Virginia creeper.
4. How poison ivy acts on the skin.
5. Why you are likely to be poisoned while perspiring.
6. How poison-ivy plants can be destroyed.
7. What to do if you have been near poison ivy.
8. What to do in case you have been poisoned.
9. Why it is wise to keep from being poisoned.

Now try to tell about these main points without looking back at the lesson. Then turn back to the lesson and read again about the points which you do not remember very well. Keep on doing this until you can tell about each point.

## Learning to Read a Graph

The drawing on page 82 is called a graph. It was made by some children to show their scores on a spelling test.

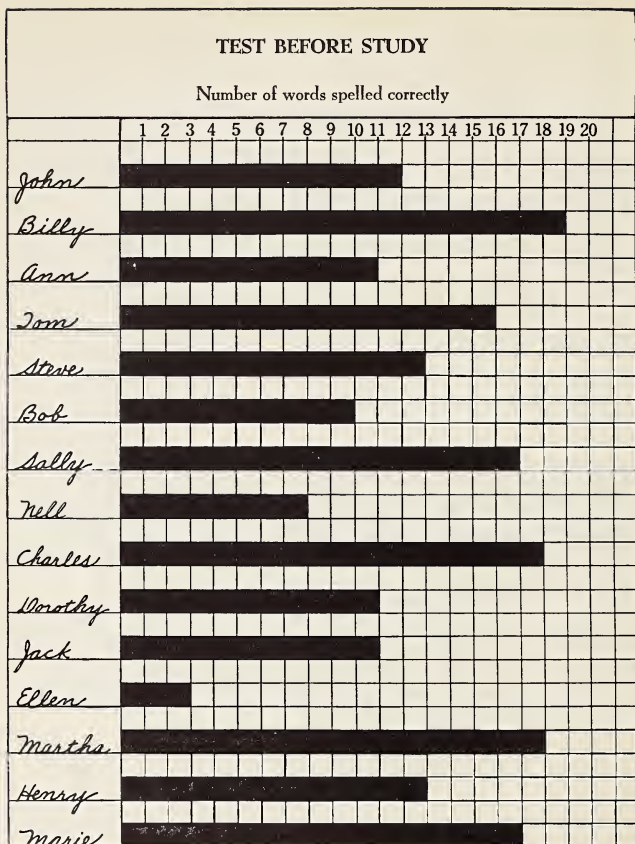
They took this test on Monday before they had studied the words. From this test each child found which words he already knew and which words he needed to study during the week.

The numbers across the top of the graph show how many words there were in the lesson. Along the left side of the graph are the names of the children who took the test.

The bar after each child's name shows how many words he spelled correctly on Monday.

### HOW WELL CAN YOU READ THESE GRAPHS?

1. How many words were there in the spelling lesson?
2. How many children took the test?
3. Which child in the class knew how to spell the most words?
4. Who missed the most words?



5. How many words did Henry spell correctly?
6. How many words did Jack misspell?
7. How many children got more than half the words right?



8. How many children had more than five words to study?

9. Which two children had to do the most work?

10. Who spelled half the words correctly?

The children studied these words during the week. On Friday they took another test on the same words. The graph on page 84 shows what these children did when they took the test on Friday.

You will need to read both graphs in order to answer some of these questions.

1. How many children spelled all the words correctly on Friday?

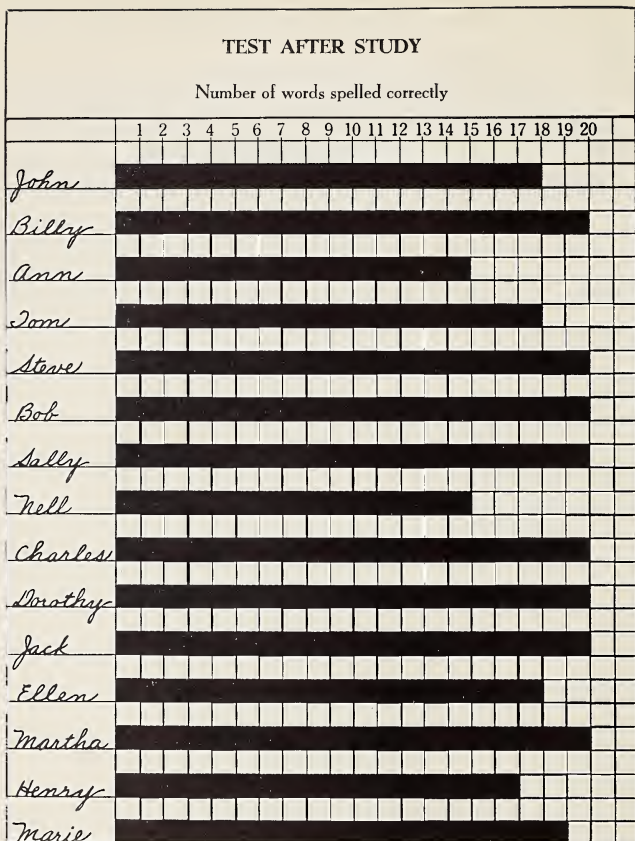
2. Which child missed only one word on Friday?

3. How many words did Nell spell correctly on Friday?

4. How many words did Martha learn between Monday and Friday?

5. How many words did Bob learn during the week?

6. Which children missed the most words on Friday?



7. How many children missed more than two words on Friday ?

8. Which two children learned at least ten words during the week ?

## Making Graphs

Perhaps the boys and girls in your class can make graphs like the ones in this lesson. They will help to show how well you learn your spelling words.

You could also make a graph to show the number of arithmetic problems each boy and girl worked correctly in one lesson.

What other things might be shown by means of a graph?

### Can You Find Other Graphs?

Graphs are used in magazines, in reports, in textbooks and reference books, and sometimes in newspapers. When you have some free time at school, look in the books in your room for an interesting graph. If you find one, study it carefully and be ready to explain to the class what it means.

You may look for graphs in magazines or newspapers too. If you find one in an old magazine or newspaper at home, your parents may let you bring it to school to show your classmates. Perhaps a committee can arrange an interesting display of graphs.

# Elephants

## I. ELEPHANTS IN THE CIRCUS

Have you ever watched the elephants marching inside the circus tent? They know just where they belong and what they should do. They walk along very quietly. Often each elephant holds the tail of the elephant in front with his trunk.

Sometimes a man sits on an elephant's head or back. He carries a stick with a hook on its end. He guides the elephant with this stick. A light touch on the ear or shoulder tells the elephant where he should go.

The elephants usually have a part in the show. In the ring they do all kinds of funny tricks. They stand up on their hind legs. They roll a big ball about. They stand on their heads and front legs. They sit on big stools and eat from a table. They dance. One circus even had a baseball team of elephants. You can imagine how funny an elephant would look trying to bat a ball!

In his book *Under the Big Top*, Mr. Cooper

tells the story of Old Barney. Old Barney was just a work elephant. One day he surprised the circus men by doing a dance he had seen the other elephants do. One of the circus men had a big harmonica made for Old Barney. He soon learned to play it while he danced. Of course he only made a loud noise on it, but it was music to him. People who watched him play his harmonica while he danced thought he looked very funny.

After the circus is over, the elephants help the circus men get ready to move to the next town. They carry the heavy tent poles. They push the big wagons up the sloping platforms to the railway cars. They pull the circus wagons out of the mud when horses cannot move them. They can even push a railroad car out of the way.

Old Barney always helped the circus men get ready to move to the next town. One night the circus wagons were stuck in the mud. Old Barney had worked so hard that he could hardly stand. His keeper had a happy thought. He brought Old Barney his harmonica. As soon as Old Barney saw it, his ears went up and his





Have you ever watched the elephants



performing inside the circus tent?



eyes brightened. He took it and began to play. It made him forget that he was tired. For hours he played while he worked. When the last wagon was loaded, Old Barney, still playing his harmonica, was led away to a well-earned rest.

Elephants learn very quickly. You have just read of three things they can learn to do. They can learn to march in a circus parade. They can learn to do tricks in the circus tent. They can help the circus men get ready to go to the next town. Later in the book you will find out other things that elephants can do.

### Can You Find the Sentence?

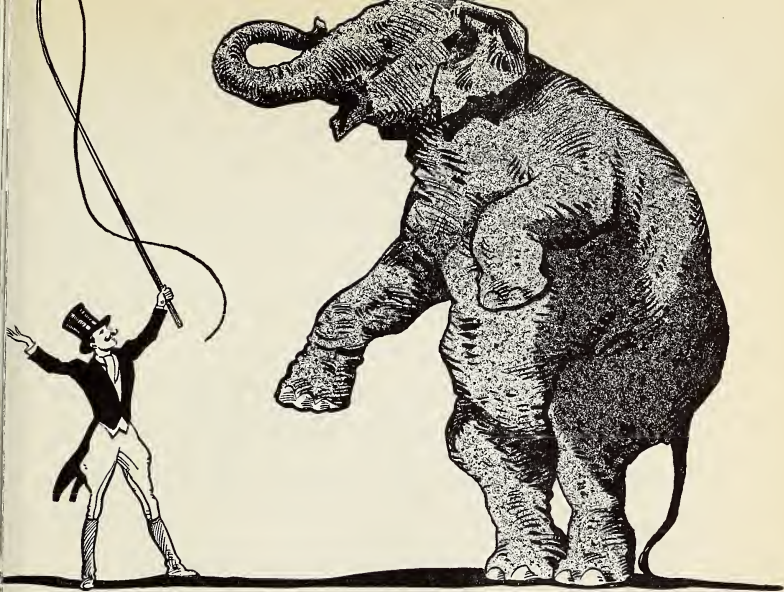
1. Find a sentence that tells how the elephants keep together when they are marching.

2. Find a sentence that tells what is done to guide an elephant.

3. Find six sentences that tell what elephants do in the show in the circus tent.

4. Find four sentences that show how elephants help after the circus is over.

5. Find three sentences that give all the things that elephants can learn to do for the circus men.



## II. THE SIZE AND AGE OF ELEPHANTS

Elephants are the biggest animals that we have on land. If you have seen elephants in a circus parade, you know that elephants are not all the same size.

Jumbo was one of the biggest elephants ever brought to America. Your grandfather and grandmother may remember Jumbo. He was one of the elephants in Barnum's circus. When he was twenty-six years old, he was nearly eleven feet high. Compare the height of Jumbo

with that of your schoolroom. Jumbo's skeleton is now in the American Museum of Natural History in New York City.

Bolivar (bŏl'ĩ ver), another large circus elephant, was ten feet high. He weighed twelve thousand pounds. This is as heavy as four automobiles.

Jumbo and Bolivar were very big elephants, but they were smaller than some wild elephants that have been killed. The big African elephants are the largest of all. One was killed that was eleven feet and four inches tall.

A baby elephant looks small as he stands beside his father and mother, but he is really a big baby. When he is born, he is not quite three feet high and weighs about a hundred and fifty pounds. That is as big as the largest kind of dog. By the time he is six years old he is about six feet tall and weighs nearly three thousand pounds. It takes him about twenty-five years to get his full growth.

Elephant drivers say that most elephants live to be about eighty years old. A few elephants live to be one hundred years old.



## Can You Answer These Questions?

Answer each of the following questions. Then reread the lesson to make sure that your answers are correct.

1. Which was the taller elephant, Bolivar or Jumbo?

2. If Bolivar stood up in your schoolroom, how far would his shoulders be from the ceiling?

3. With what was the weight of Bolivar compared?

4. With what animal that you know was the baby elephant compared?

5. Does it take much longer for a baby elephant to reach his full growth than it does for a dog?

6. About how many times as tall may an elephant be at six years of age as he was when he was born?

7. About how long does it take for an elephant to reach full growth?

8. Where are the largest elephants found?

9. Do most elephants live to be eighty years old, or do most of them live to be one hundred years old?



### III. WILD ELEPHANTS AT HOME

Wild elephants wander through the jungles of the warm parts of Asia and Africa. They usually travel in herds. There may be ten, twenty, thirty, or, once in a while, even more than a hundred elephants in one herd. One explorer in Africa saw a herd of seven hundred elephants. The herd always has a leader who knows where to find food and water. The leader of the herd is usually a mother elephant.

There are baby elephants in almost every herd. They are the pets not only of their own

mothers but also of the whole herd. They are as full of fun as kittens and like to play tricks. Once two baby elephants hid from their mother and then squealed as if they were hurt. When their mother ran to see what was the matter, they bumped her and then tried to run away. She gave each one a hard slap with her trunk. They understood perfectly that they were not to play that trick again.

What an elephant eats depends upon where he lives. In Asia he eats hay, wild fruit, grass, tender young bamboo shoots, sugar cane, and other juicy plants. In Africa he eats roots, bushes, branches of small trees, and grass.

One day an explorer was watching an elephant eat leaves from a good-sized tree. Soon the elephant had eaten all the leaves from the lower branches, but he wanted the rest of the leaves too. Even with his long trunk he could not reach them. So he pressed against the tree and pushed until the roots cracked and the tree slowly fell to the ground. Then he picked off the tenderest leaves and branches and finished his dinner.

Wild elephants may visit the farmer's fields and eat the crops. Sometimes the elephants do not stop with destroying the farmer's fields; they may even tear down buildings and kill the farmer.

The elephant feeds himself with his trunk. A man who knows a great deal about elephants says that the elephant's trunk is "at once a powerful arm and hand, a drinking cup, and a movable nose." It is also a hose, for he uses it to squirt water over himself and into his throat to drink. He smells and feels with his trunk. Although a blade of grass is so light and small, he can pick it up with his trunk. Yet he also uses his trunk to lift and throw a tree that weighs a ton. With it the elephant can strike a powerful blow, or pick up an animal and throw it crashing to the ground.

Elephants are very fond of water. They not only like to drink it but they also like to bathe in it. They take many baths to keep their skin moist. Often, when they cannot find water enough to swim in, they use their trunks to give themselves a shower bath. They are not

afraid of deep water, because they are very good swimmers. Sometimes a whole herd may be seen swimming at once with only their heads showing above the water.

Elephants suffer from the heat of the sun, and so, unless the weather is cool and cloudy, they usually do not travel in the daytime. During the hottest part of the day, the herd may find a shady spot to rest, where the animals sleep standing up. At night, when they hunt for food, elephants travel together.

Elephants are usually kind to one another. They like to be together. They help one another. They have even been known to help one of the herd that had been shot by hunters. There is a large statue in the American Museum of Natural History which shows two elephants helping one that is wounded. An elephant is on each side of the injured animal. They are holding him up to help him go to a safe place.

Those who have studied the elephant in his jungle home say that he, rather than the lion, should be called the king of beasts. It is said that no animal can defeat him in a fight.



## Yes or No?

1. Wild elephants live in the jungles of Asia and Africa.

2. The leader of the herd is usually a father elephant.

3. The herd leader knows where to find food.

4. There may be as many as a hundred elephants in one herd.

5. Baby elephants are full of fun and like to play tricks.

6. Elephants everywhere eat the same food.

7. Elephants sometimes destroy fields and farm buildings.

8. The elephant's trunk is of no use to him.

9. Elephants are afraid of water because they are poor swimmers.

10. Elephants are not bothered by the heat of the sun.

11. Elephants are usually kind to one another.

12. The elephant should be called the king of beasts.

13. A lion can easily defeat an elephant in a fight.

#### IV. HOW ELEPHANTS ARE CAPTURED AND TRAINED

Where do you think the owner of a circus gets his elephants? He often buys them. But how are these elephants caught? Many of them are caught wild. Because it takes elephants so long to grow up, it is cheaper to catch a full-grown elephant than to raise one from the time it is a baby. Of course elephants which are used in a circus or for work must be caught without being hurt. It is not easy to capture wild elephants, but men who know how can do it. Usually these men use tame elephants to help them.

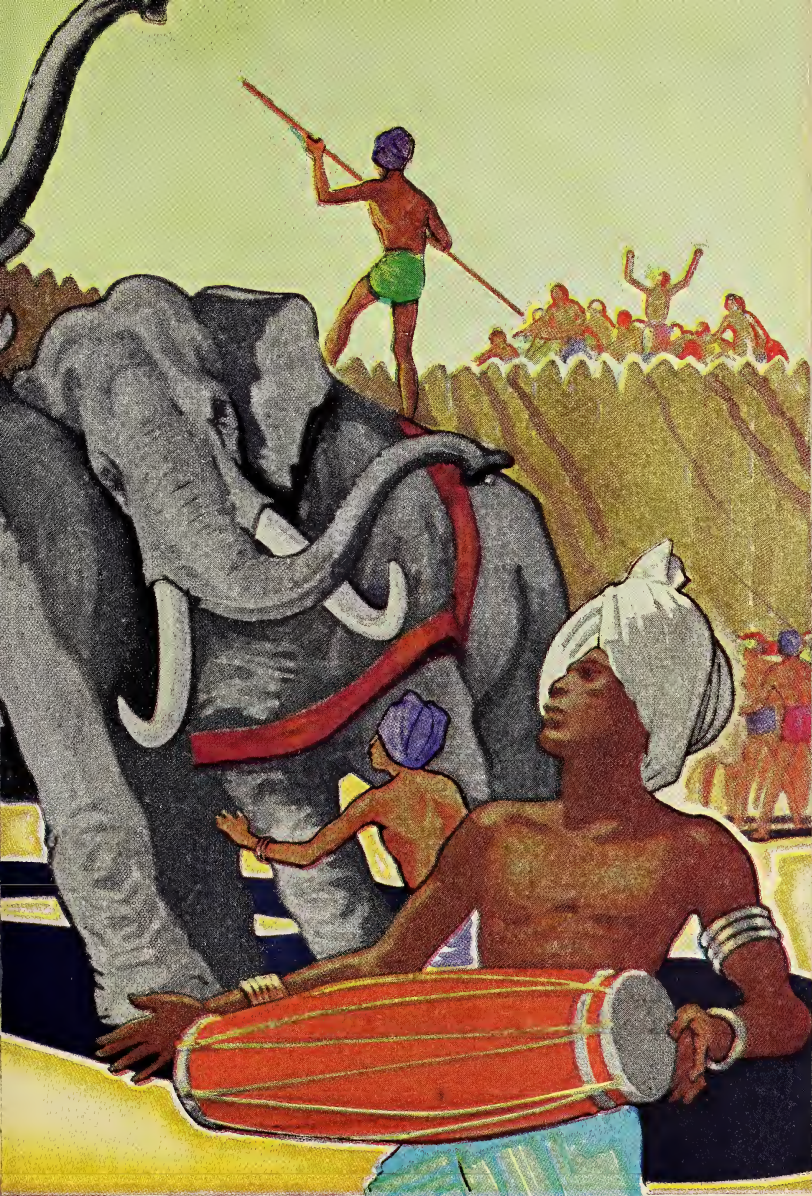
This is the way most elephants are captured. Men who understand the ways of elephants are sent out to look for them. When these men find a herd, they cut logs to build a pen close by. While they are doing this, they never lose track of the herd until the pen is ready.

Hundreds of men work hard to build the pen. The pen is made in the form of a circle from sixty to a hundred and fifty feet across. It is made of logs at least a foot thick and more



Now begins the exciting





and dangerous work

than ten feet long. The logs are set deep in the ground and are tied together with green bark or vines.

An opening is left for a gate. The gate is made of strong logs and is built so that it can be lowered quickly after the elephants have been driven into the pen. Two strong fences of logs, one from each side of the gate, run a long way out into the jungle. The space left between the two fences is shaped like a v, narrow at the gate and getting wider apart as it goes farther into the jungle.

If it were not for these fences, the elephants might get away before they could be driven through the narrow gate. But once the herd has been driven between the fences, the elephants must go straight ahead, through the gate, and into the pen. The fences have to be covered with leafy branches of trees so that the elephants do not guess they are being trapped.

When the pen is ready, a great many men, sometimes a thousand or more, surround the herd. They drive the elephants toward the pen by waving torches and by making all the noise



they can. As soon as all the elephants have been driven through the gate into the big pen, the gate is dropped and the wild elephants are prisoners.

Now begins the exciting and dangerous work. The elephants are so strong that they could tear down the side of the pen if they pushed against it. However, when the elephants start toward any one side of the pen, the men on the outside run to that part of the pen. They wave torches, beat on drums, shoot guns, and make as much noise as they can. In this way they drive the elephants back.

After a time the captured elephants give up trying to escape and crowd together in the center of the pen. Now men, riding on strong, trained elephants, enter the pen. The tame elephants seem to quiet the captured ones. One trained elephant goes to the right of a captured elephant, and another goes to the left. They squeeze the captive tight between them while a third trained elephant pushes him in front and a fourth pushes him behind. One rider slips a strong rope around one of the captive's feet.

Another rider slips a rope around another foot. When ropes have been fastened around all four feet of the prisoner, the trained elephants push him over to a tree. The men tie him there. Before long all the wild elephants have been tied up.

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The training of elephants begins as soon as they are captured. The men who train and care for elephants are called *mahouts* (ma houts'). The mahouts show the elephants that they will not hurt them. They bring them food and water. Soon the elephants lose their fear. In a few days they can be led away by a mahout, mounted on a trained elephant.

You may think that it would take a long time to tame a wild elephant and teach him what to do. This is not true. Most elephants become tame very soon. In a few weeks they can be taught to push a wagon. The old elephants are often more easily tamed than the young ones. They seem to learn more quickly too. Perhaps they do not want to play so much.



## Can You Tell How Elephants Are Captured and Trained?

Use the following outline to help you remember the important points.

### *Finding the herd*

### *Building the pen*

- Planning the size and shape of the pen
- Choosing the length and thickness of the logs
- Fastening the logs together
- Planning the fences and gate

### *Capturing the herd*

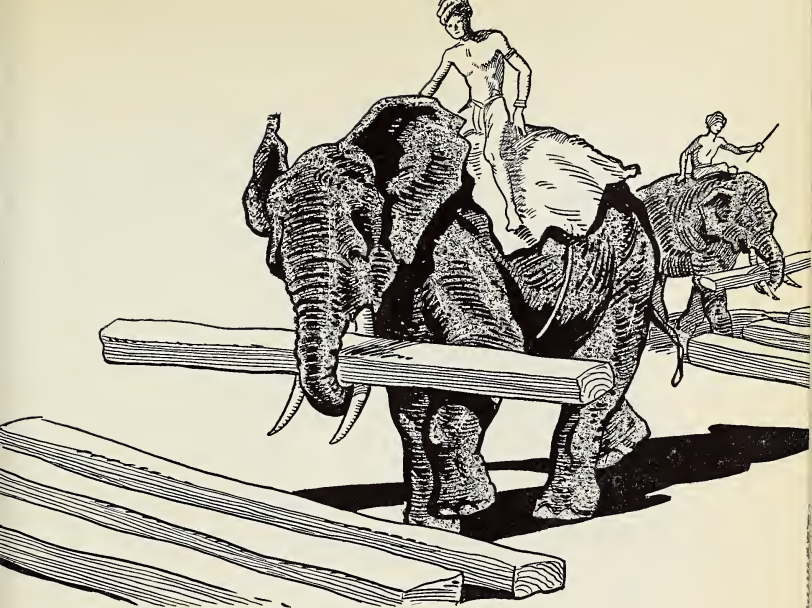
- Surrounding the herd
- Driving the elephants into the pen
- Keeping the elephants in the pen
- Quieting the captured elephants
- Tying the wild elephants

### *Training the wild elephants*

## V. HOW TAME ELEPHANTS ARE USED

You have already learned that tame elephants are often used to help in a circus. However, most tame elephants are not in the circus; they are owned by people who teach them to work.

In India elephants work in the lumber camps. They help to take the logs from the forest. An



elephant with tusks can easily move a small log. He shoves his tusks beneath the log and wraps his trunk around it. Then he can carry the log to the pile where it belongs.

If the log is heavy, the elephant drags it by one end to the pile. Sometimes a rope is used to help the elephant move the heavy logs. The men fasten one end of a strong rope to the log. The elephant takes the other end of the rope between his strong teeth. Then he drags the log to the pile where it belongs.



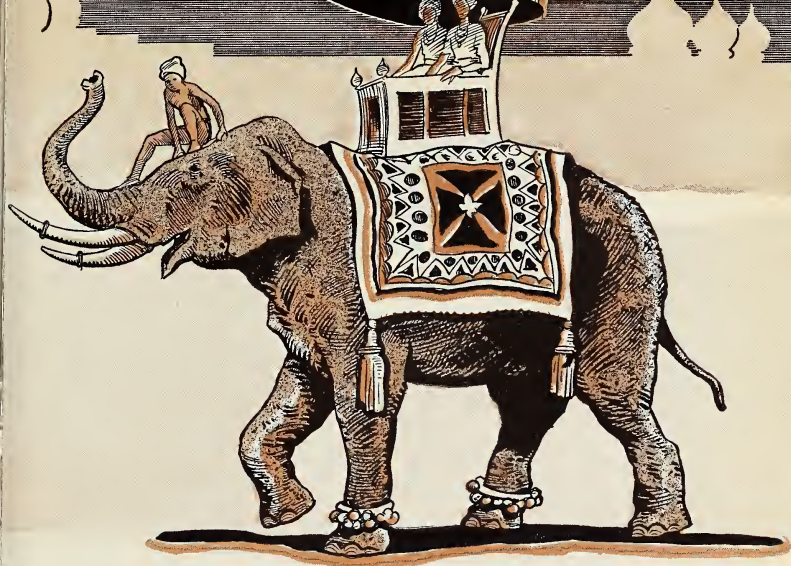
The elephant learns to place the logs so carefully on the pile that they do not fall off. He can do this without much help from the men in the lumber camp. When he knows what his mahout wants him to do, he keeps at his work whether the mahout is watching him or not.

The elephant can also learn to move or push wagons. He can push better than he can pull. He can push hard enough with his head to move a heavy car on a railroad track.

The elephant can carry a heavy load on his back. He is very useful in carrying loads over hills and mountains where the roads are so bad that neither wagons nor automobiles can be used.

In some parts of Asia people ride from place to place on elephants. The mahout usually sits near the elephant's head. The other riders sit in a seat like the one in the picture. This seat is tied on the elephant's back. It is called a *howdah* (hou'da). Several people can ride in it at one time.

How do you suppose people get on to the elephant's back? The mahout may mount an



elephant by having the animal lift a front foot and bend it upward. He steps on the elephant's foot, catches hold of him by the ear, and climbs up to his seat. Or the elephant may kneel to make it easier for the rider to climb to his back. Those who ride in the howdah usually climb up by means of a ladder.

In India people sometimes use elephants to hunt tigers. The hunters sit or stand in the howdah while they shoot. You can see that it would be much safer to shoot the tiger from the back of an elephant than from the ground.

Sometimes a tiger that is cornered will spring on the elephant's head and hang on there. If the elephant can get his trunk around the tiger, he slams him to the ground, holds him down with one foot, and kneels on him. That is the end of the tiger.

A long, long time ago, long before men had guns, soldiers sometimes used elephants in war. They rode huge elephants into battle. The enemy who were on foot had very little chance against these powerful animals. The elephants trampled them beneath their feet. The soldiers riding in the howdahs fought their enemy with arrows. Frightened horses fled whenever the elephants came near. After a while the enemy learned that by waving torches before the eyes of the elephants they could frighten them away. Elephants, like most animals, are afraid of fire.

### Find How Tame Elephants Are Used

Part V of this story tells seven ways that tame elephants are used. Find each of these ways.

## VI. THE VALUE OF ELEPHANTS

How much do you think an elephant is worth? A small, untrained elephant may be bought for a few hundred dollars, but a large elephant that has been taught to work or to act in a circus costs much more. We know how much Jumbo cost. He was not full-grown when Barnum saw him in a London zoo. Barnum wanted Jumbo very much. He thought he would grow to be the biggest elephant in any circus. So he paid ten thousand dollars for him. Of course that was a big price even for a fine elephant.

In Asia, where elephants are used for work, the price depends upon the size of the animal, its strength, its training, its color, and how well it behaves. A small elephant may be bought for what one would pay for a small automobile. The larger and better-trained animals cost as much as the larger and better-made cars.

Wild elephants are often killed for their tusks, which furnish the world's ivory. Many men make their living as ivory-hunters. Their job is dangerous, and often hunters are killed





How should you like to ride





one of these elephants?

by these powerful beasts of the jungle. African elephants are hunted chiefly for their valuable tusks.

A great many things are made from these ivory tusks. Ornaments of different kinds, billiard balls, chessmen, handles for knives and umbrellas, and the keys of many pianos are made of ivory. For hundreds of years beautiful objects and figures have been carved from ivory. Some of the most valuable of these may be seen in museums.

Many elephants are killed each year so that their tusks may be sold. One pair of tusks may weigh more than a hundred pounds and be sold for several hundred dollars. Many people think that soon very few elephants will be left if so many of them are killed for their tusks.

Of course the value of an elephant depends upon how much someone wants him. In certain parts of Africa the natives are glad to get rid of the elephants, which damage their crops and sometimes destroy their houses. Sometimes when new land is to be farmed, all the elephants in that part of the country are driven away or killed.

## How Carefully Do You Read?

1. Find the paragraph that tells about Jumbo. Read the sentences that answer the following questions :

- a. How much did Jumbo cost ?
- b. Where did Barnum find him ?

2. Find the paragraph that tells the five things upon which the price of an elephant depends.

3. Find the paragraph that tells what things are made from the tusks of the elephant. Which of these things have you seen ?

4. Find the paragraph that gives two reasons why the natives of Africa are sometimes glad to get rid of elephants.

## VII. THE CARE OF ELEPHANTS

Good work elephants and good circus elephants are so valuable that they are given excellent care. The keeper must know how to feed them, he must know what to do to keep them well, and he must know how to keep them happy.

You can imagine that elephants eat very big meals. In India, where the elephant works for people, he may eat more than six hundred pounds of green food in one day. In addition to this, he eats twenty to twenty-five pounds of cooked rice. A circus elephant may not eat quite so much, but it costs a great deal to feed him.

Elephants get sick just the same as horses do. You may think that a little thing like a germ would not do much harm to so big an animal, but a germ may be as dangerous to an elephant as to a rabbit.

Most elephants seem to be quite happy after they have been captured and trained. They are usually kind, patient, faithful, and obedient. Some of them are full of mischief and play tricks on their keepers. Once in a while, however, an elephant dislikes his keeper. This is usually because the keeper has been unkind to him. If an elephant does not like his keeper, a new keeper must be found. Sooner or later the elephant is almost certain to injure a keeper he does not like.



Sometimes a tame elephant becomes very dangerous. He tears down everything around him. He may even kill a keeper who has never treated him unkindly. Then he has to be shot. Such elephants are called rogues.

Men who know a great deal about elephants think that most rogue elephants are sick. Some may have a toothache. Others may have eaten something that has made them sick.

Elephant keepers can sometimes tell when an elephant is about to become dangerous. Then they tie him up for a week or two. Very often he is all right by the end of that time. If he does not stop being dangerous, there is nothing to do but shoot him.

### Can You Find the Answers?

1. What three things must the elephant keeper know how to do?
2. What do tame elephants eat in India?
3. What words in the lesson are used to describe most elephants after they have been captured and trained?
4. What are dangerous elephants called?



5. What is thought to cause elephants to become dangerous?

6. What should be done with an elephant when he is about to become dangerous?

### A Program on Elephants

Do you think it would be interesting to give a program about elephants? Here is a list of fifteen topics. Each of you might choose one topic and prepare an interesting talk from what you have read about that topic.

1. Tricks that circus elephants do.
2. How elephants often march inside the circus tent.
3. How elephants help the circus men do the work.
4. The size of full-grown elephants.
5. Baby elephants.
6. The food of wild elephants.
7. The elephant's trunk.
8. Herds of wild elephants.
9. The pen used to catch wild elephants.
10. How wild elephants are caught and quieted.

11. How elephants help in a lumber camp.
12. Other work that elephants do.
13. How much elephants are worth.
14. Ivory.
15. Taking care of tame elephants.

The story about elephants is divided into seven parts :

- I. Elephants in the circus
- II. The size and age of elephants
- III. Wild elephants at home
- IV. How elephants are captured and trained
- V. How tame elephants are used
- VI. The value of elephants
- VII. The care of elephants

Can you tell in which part you would look to find out about each of the fifteen topics? In which part would you look to find out about the topic you have chosen?

Turn back to the part that tells about your topic. Read all the paragraphs that tell something about it. Then prepare an interesting talk.

## Public Property

One day Charles came home late from school. His father asked him why he was late. Charles told his father that he had stayed to clean up some ink that he had spilled on the floor. "I can't see why I have to be so careful of the school floor," the little boy said; "the schoolhouse doesn't belong to anyone."

His father said: "That is where you are mistaken, my son. The school building is partly yours. It is a public building, and everyone has a share in public buildings." Then Charles's father talked to him about public buildings and what children can do to help to take care of them. This lesson tells you the things that Charles's father told him.

1. All over the world, millions of children attend school. Wherever there are children who are old enough to go to school, schoolhouses must be built. It has cost many millions of dollars to build all the schoolhouses. It also costs a great deal to buy desks, bookcases, and other furniture for them.

2. Who do you think pays for all these things? All grown-up people are expected to pay their share. Your father and mother help when they pay their taxes.



3. No one person owns these buildings. Because the schools belong to us all, we say they are public buildings.

4. Although you may not pay money to build and care for your schoolhouse, you can help to keep it in good order. No matter how hard the janitor tries to keep the school building clean, it will not look well unless you do your part. What are some of the things that you can do to help keep your school neat and pleasant and in good condition ?

5. First, you can help to keep the floors clean. You can do this in many ways. Be sure that

your shoes are clean before you enter the building. It is just as important not to carry mud into the schoolhouse as it is not to carry mud into your own home. Pick up any paper or crayon which has fallen to the floor. When you write at the blackboard, be careful not to drop your chalk.

6. Second, you can be careful not to mark the furniture or any part of the building. Never write or draw pictures on the walls. Be careful not to cut or scratch the desks, chairs, or any part of the woodwork. You should take just as good care of school furniture as you do of the furniture in your own home.

7. Third, you can help to keep the school yard looking well. If there is a lawn, try to keep it beautiful. Do not spoil it by making paths across it. Never throw paper bags, apple cores, gum wrappers, or fruit peelings on the ground. When you are playing, try not to run against the bushes or over the flowers. Never cut the bark of the trees.

8. Fourth, you can be careful not to break windows. Often windows are broken by having



stones or balls thrown against them. Many windows are broken by children who play around the schoolhouse during vacations. Children who are allowed to play on the school playground during a vacation should be careful not to injure anything.

9. There is other public property besides your school that you can help to take care of. What other buildings besides schools belong to the public? Can you name other things besides buildings that belong to the public? Do parks belong to the public?

### Giving the Subject of a Paragraph

This lesson about public buildings has nine paragraphs in it. *Why our school buildings cost so much* is a good subject for the first paragraph.

What would be a good subject for the second paragraph?

Try to think of a good subject for each paragraph in the lesson.

Be sure that your subjects are topics and not questions.

Write your subjects on paper.



In the faint light of early morning





e caravan reached the end of its journey

## Nazar the Shepherd

Nazar (nă zăr'), the orphan boy, climbed onto his camel. He hung on dizzily while the animal got to its feet. He rode out of the city gates of Baghdad (băg'dăd) with his new master, Khalif (kă lēf'). It is a law of the desert that an orphan may be taken into the nearest tent and set to work herding sheep. Nazar was on his way to the Green Spot in the desert, which was to be his new home. With the tinkling and booming of the camel bells, the caravan moved slowly across the desert.

### I. THE GREEN SPOT

Three long nights of travel, with only the stars and a few faint tracks to guide them, brought the caravan at last to the Green Spot. The black tents owned by Khalif could be seen in the faint light of early morning. The spongy feet of the camel had broken the jolts of the ride. Nazar had not been tired by the journey. Indeed, he could hardly wait for his camel to kneel down on the ground so that he could climb off and look about his new home.

Family and servants, gathered in front of the largest tent, eagerly welcomed the master's return.

"Light to our eyes! May your arrival be good!" they said, crossing their arms on their breasts and bowing politely.

Khalif returned their greetings. Then he saw that they were looking at Nazar.

"Nazar, come here," he said, calling the boy to his side. "This boy I have brought from Baghdad. He is an orphan and I am taking him as one of my family. Ali (ä'lē) and Jasim (jä'sēm), you came to my tents as orphans six years ago. I shall place Nazar in your care. Teach him the ways of the desert. He is from the Great City on the Tigris (tī'grīs) and knows only the ways of the city. Teach him to care for the sheep, that he may earn his keep and be of value to me. And you, Jasim, teach him to ride. You can stick to a camel like a flea. But I noticed that Nazar had some trouble with his camel. Was it not so, Nazar?" Khalif laughed and went inside his tent.

Nazar looked about him. The Green Spot was a low place between several low, rolling hills. The ground was only faintly green where the grass had been nibbled close by the flocks of sheep



and goats. A small group of palm trees marked the location of the well.

These people of the desert lived a wandering life. They depended on these widely scattered wells and the five inches of rain that fell each year for the water for themselves and their flocks.

A half-dozen black tents stood close to the precious water. They could easily be moved from place to place as the supply of grass wore out.

The men began to unload the camels. The women and children watched eagerly to see what



had been brought from the Great City. It did not take long. The chief had taken to the city a big load of wool, spun yarn, and hand-woven woolen cloth. He had brought back a small load—bags of coffee, cones of sugar, salt blocks, and some cotton cloth. People lived simply on the desert and their needs were few.

“Come with me, Nazar,” said Ali. “It is already late, and I must take the sheep out to pasture.”

Ali gathered his flock together and started toward the hills. As the two boys walked along, Nazar asked many questions. Ali told him about the life of a shepherd.

“You have to take the sheep out at dawn and lead them to pasture. Since you are new, the master will give you only fifty to look after. I have been with him six years and I can now care for a flock of five hundred. All day you have to watch so that none of them wanders or is stolen. When the sun goes down you will lead them to water and then bring them home. It is the same every day.”

“And do you receive no pay for your work?”

"Oh, yes! The master pays well. Every six months he will give you seven lambs per hundred, and your food and clothing, too."

Looking at Ali's few torn clothes, Nazar wondered how many years it had been since the shepherd had received any new clothes.

"Of this flock, many are mine," Ali went on. "In the last lambing season the master gave me thirty. My own little flock had lambs, too. The master feeds the sheep and cattle of his servants' flocks. I should have had a larger flock of my own, but I exchanged some of the sheep and goats for a cow and a donkey. Some of them I sold to buy a wife and a tent. Last summer the master put me on three acres of land. So I shall not work as his shepherd after you have learned to take my place. I shall be busy with my own flock and land."

"Where did you get your tent, Ali? I see no shops here." Nazar was puzzled.

Ali laughed. "The women made it of goat's hair. When you look through it toward the sky, you think it is so thin that the little holes will let the rain come through. But it is not so. Water

runs off goat's-hair cloth. It does not often rain, anyway. The worst thing is the sandstorms. Sometimes the winter winds are very cold. Then it is that we wear our warm brown cloaks, which the women weave from camel's hair. Yes, you have much to learn."

At noon the boys sat down on a large rock to eat their lunch of coarse barley bread and dates. They drank fresh, warm goat's milk.

"No one is likely to steal your lunch here," said Nazar. Then he told Ali how he had once had his lunch stolen when he worked in the Great City.

Ali was interested in Nazar's tale and was surprised at the things he told. He had never seen a shop, a river, a motorcar, or a train. He was very eager to know about them. He had, however, seen the airplane that crossed the desert twice a week.

That night in the men's tent Nazar again told his desert friends about life in the city. They listened eagerly as he described the great river Tigris. They could not understand why so much water did not wash away the land.









An old man spoke up. "We have heard of another river west of us. It is called the Euphrates (*û frā'tēz*)," said he. "We have never seen it, but a traveler told us of it once." Then Nazar listened to their tales of desert life and at last fell asleep where he sat. When he tumbled over in a heap on the ground, someone threw a camel's-hair cloak over him, and he lay there until morning.

Day after day Nazar went with Ali when he led the sheep out at dawn and brought them back at the end of the day. Finally the day arrived when Nazar was allowed to take the flock out alone. Jasim had been given a part of the flock to herd, and Ali had taken out his own sheep and goats. There remained about fifty sheep that Nazar led to the hills at sunrise.

## How Do the People of the Desert Live?

1. How are orphans taken care of in the desert?
2. How long did it take to make the trip from Baghdad to the Green Spot?
3. What two things helped the caravan to find its way?
4. Who were Ali and Jasim?
5. What two things were they asked to teach Nazar to do in the desert?
6. Why are tents the best kind of home for these people?
7. What three things had the chief taken to the city to sell?
8. What four things did he buy in the city?
9. How many sheep would Nazar be given to herd at first?
10. How many sheep did Ali herd?
11. What three things does the shepherd need to do to take care of the sheep?
12. What three things was Ali given as pay for his work?
13. What four things had Ali bought with part of his pay?
14. What were the tents made of?

15. In what three kinds of weather did the desert people need tents and cloaks?

16. What three things did the boys have for lunch?

17. What four things did Nazar tell about that Ali had never seen?

18. What had Ali seen that came from the Great City?

### Writing Answers in Short Form

Stories like "Nazar the Shepherd" often give information for your social-studies work. It is a good thing to know how to write this information in a short form. Notice how easily the material is then read.

What Three Things Did the Chief Sell in the City?

I. Wool

II. Spun yarn

III. Hand-woven cloth

Use this short form to write the answers to questions 3, 12, and 15 of the last exercise.



"This is a fine place to bring your baby!" he said to the old mother she



## II. THE LITTLE BLACK LAMB

Nazar sat on a rock in the late-afternoon sunshine counting his sheep. He always counted the sheep to be sure they all were there before he started for home.

"Forty-seven, forty-eight, forty-nine," again and again he counted. One sheep was missing. Which one was it? With a worried frown he looked over his flock. Since he had been alone, he had named every sheep and knew each one from all the others.

"It is old Waggle-tail," he decided. "Where can she be?" Then he began to hunt along the hillside, behind the rocks, in the caves. Down the steep, rocky slope of the other side of the hill he finally found her with a tiny black lamb.

"This is a fine place to bring your baby!" he said to the old mother sheep. "I can carry your lamb in my cloak, but I don't know how I can ever drag you over the steep rocks."

With much pushing and pulling he got the fat old sheep to the top of the hill. In the few months he had lived on the desert, his feet had become as hard as iron from walking on the hot





sand. But these rocks had sharp points, and he hurt one foot badly. Tearing a piece off the turban he wore on his head, he bound his foot and went back for the little black lamb. It was soft and warm, and he held it carefully in his cloak as he climbed up the hill.

"Now, old Waggle-tail! You can start for home," Nazar said, and he called the rest of the sheep. Among the flock were several new little lambs, and they ran along playfully beside the older sheep. Nazar led them all to water and brought them to the tents just as the last bit of the big red sun disappeared behind the purple hills.



When his work was finished, Nazar limped to the men's tent.

"Please, Master," Nazar spoke shyly, "may I have the new little lamb that I brought home tonight?"

"What! A black sheep?" Khalif asked in surprise. "A white sheep is more valuable for its wool than a black one. Did you not know that?"

"Yes, Master, but I should like to have old Waggle-tail's baby," Nazar said.

He would not tell the man that he wanted the little black lamb because it had snuggled its nose down into the curve of his arm as he carried it home. Khalif might have laughed at him.

He was indeed happy that his master let him have the little lamb. He marked it as his own, and the little black lamb was the beginning of Nazar's flock. In the years to come he would add many more lambs until his flock would number nearly a hundred. And he was always careful not to let any of his sheep wander from the flock and become lost.

*Anna Ratzesberger*

## Making Questions

This story tells you many things about the way people live on the desert. One good way to show that you understand these facts about desert life is to make questions about the important topics. *Training of orphan boys* is one such topic. Here are two questions that you might ask about it:

- a. What was a boy expected to learn?
- b. Who were the teachers of the new boy?

Six other important topics are given below. Make twelve good questions that are answered in this story, two questions for each of these six topics.

- 1. Methods of travel.
- 2. Kinds of homes.
- 3. Things bought and sold.
- 4. Care of the sheep.
- 5. Kinds of animals used.
- 6. The food of the desert people.



## How to Remember What You Read

Many of the lessons that you study are followed by tests. These tests show which parts of the lessons you understand and which parts need more study.

You may read some of the lessons so well that you can answer most of the questions correctly when you finish your reading. However, if you were asked the same questions a week later, you probably would find that much you had learned had been forgotten. Even a day later you would have forgotten some of the answers that you knew when you first took the test.

If a lesson is worth learning in the first place, it is worth remembering. Here are some of the things that you can do to help you to remember what you read :

1. Choose the main points that are worth remembering.
2. Make a question about each point. Try to answer each question. Then read the lesson again to see whether or not your answer is correct and complete.



3. If there is any part of the lesson that you did not remember, read that part again very carefully.

4. Even when you can answer all the questions correctly, go over them again to fix the answers in your mind.

The four points given above are good ones to follow each time you study a lesson.

Choose a lesson you have had that tells facts that should be remembered. Without reading the lesson again, take the test at the end of it. How well can you do the test now?

You may have forgotten some of the facts in the lesson that are worth remembering. Study the lesson again and follow the four suggestions for remembering the main points in it. Take the test again and see how much you can improve your score.



## Daniel Boone, a Brave Pioneer

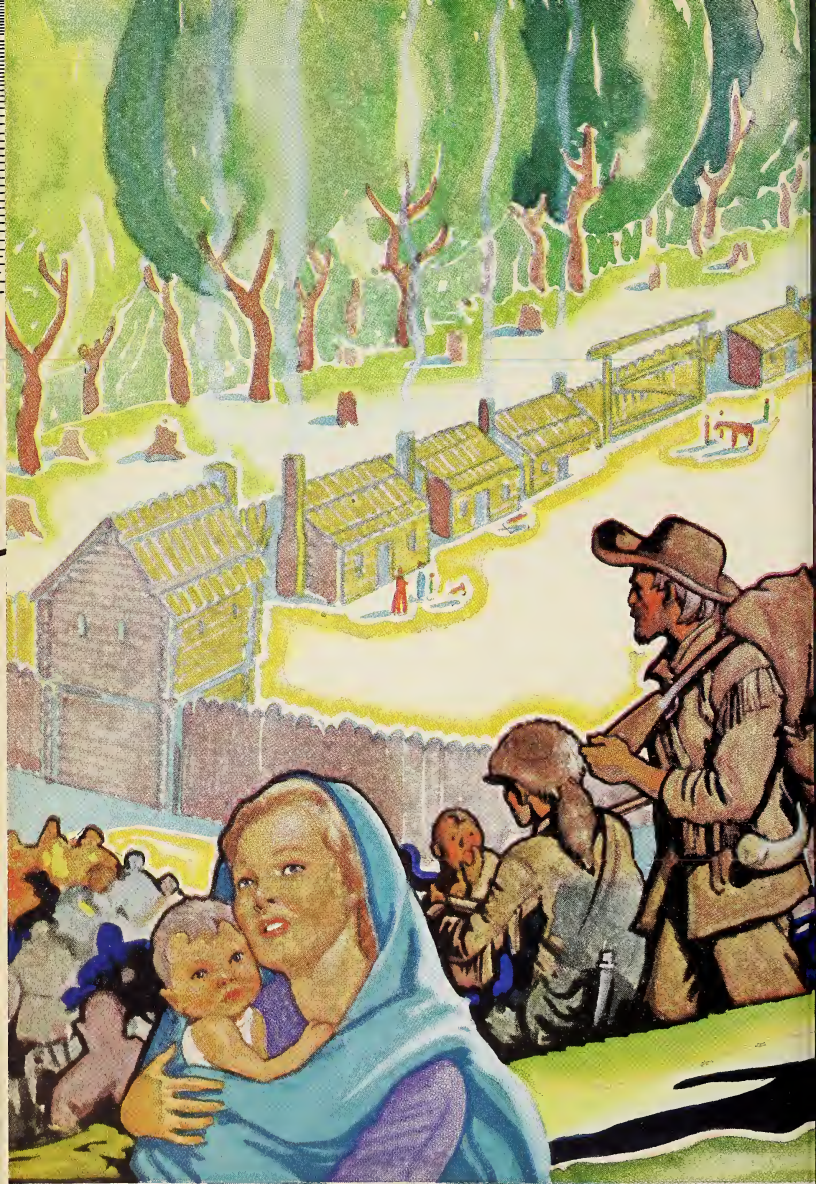
### I. THE KENTUCKY SETTLEMENT

In a little cabin near a big woods there lived a man named Daniel Boone. He liked to hunt, and so he did not want to live where there were a great many people. He explored the deep woods and rough, new country far beyond his home. He even crossed over the mountains far away and hunted where few white men had ever hunted before.

Boone wished to build a new home beyond the mountains to the west. It was a rich country, and hunting was excellent there. But because of the danger of attack by the Indians, the new country was not safe for settlers.

Finally, the Indians promised to live in peace with the white men. Then, with thirty other brave hunters, Daniel Boone led the way across the mountains. They made a narrow trail for horses, called the Wilderness Road. This trail followed the old buffalo paths and Indian trails. At the end of every mile Boone and his men cut bark from the trees to show those who might come after them which way to go.

After traveling for ten weeks, the hunters reached the Kentucky River. This was the place Boone had chosen for the new Kentucky settlement. It was called Boonesborough (bōonz'-bûr ô). The men soon built log houses. Then they began to build a stockade, a strong, high fence of posts set close together in the ground. The stockade was to protect Boonesborough from Indian attacks. But hunting was necessary if the men were to have food, and it was much more



How glad everyone wa





reach Boonesborough at last!



interesting than building. So the men were very slow at finishing the stockade.

Other settlers came to join Boone's Kentucky settlement at Boonesborough. Soon thirty houses stood in the stockade. Some of the settlers hunted, some guarded the stockade, some cut down trees, and some planted corn. Some of the settlers had farms outside the stockade and lived on them. However, they came inside the stockade in times of danger.

After a time, Boone went back to his old home east of the mountains to get his family. There were as yet no women or children at Boonesborough. Other families joined Boone, and they set out together for their new homes. Each family had its own food, seeds, plants, tools, dogs, cattle, and horses. Older boys drove the cattle. Little children rode among the bedclothes on the horses' backs. The little group followed their guide through the forest by day and camped under the trees at night. The trail was rough, and the journey was hard. How glad everyone was to reach Boonesborough at last!

## Can You Match These Headings with Paragraphs?

Number your paper from 1 to 6. Each number stands for one of the six paragraphs in "The Kentucky Settlement." Here are six headings, one for each paragraph. Each heading has a letter.

Read the first paragraph. Read the headings below and decide which heading best fits the first paragraph. Then write its letter after number 1.

Do the same thing with the other paragraphs in the story.

- a. Good and bad points of the new country.
- b. The beginning of Boonesborough.
- c. A man who liked the new country.
- d. The settlement grows.
- e. The women and children come to Boonesborough.
- f. The hunters move to the west.

## Can You Summarize a Paragraph?

After you have matched the headings and paragraphs, you will have the headings written in their right order. Using one heading as a

topic, prepare a short talk telling the important points given in the paragraph. Telling the important points of a paragraph in as few words as possible is called summarizing a paragraph. It is one good way of showing that you really understand what you have read.

The topic for paragraph one is *A man who liked the new country*. When you reread the first paragraph, you will find that it tells you who this man was, where he lived, what he liked about the new country, where he went, and what he did. Now try to tell these points in your own words, making an interesting summary.

Make interesting summaries for the other paragraphs.

## II. THE CAPTURE

The settlers used a great deal of salt in preparing their meat so that it would not spoil. Late in the year, they ran out of salt. The only way to get more was to boil down water from salt springs near Boonesborough. This salt water was placed in large kettles and boiled until only salt remained in the bottoms of the kettles. It

took a long time to make salt in this way, since five hundred gallons of water had to be boiled down to make one bushel of salt. It was decided to make enough salt to last a year. Boone was chosen to lead the first party of saltmakers. In January, he set up the saltmaking camp at the springs.

While half Boone's men worked at the boiling, some watched for Indians. Others hunted for food. Most of the men also set traps in the woods near the springs to trap animals for their furs.

It was the first week in February. Each day now, Boone was expecting another party of settlers to come and take over the saltmaking. Then he and his party of men could return to Boonesborough. But visitors of a different kind appeared.

Boone was returning to camp after a day's hunting. His horse was loaded with buffalo meat and beaver skins. He could hardly see for the blinding snowstorm. He could not be so careful as usual. Suddenly, four Indians sprang from behind some bushes.

Boone was a swift runner, and so he tried to escape by running from the Indians. But he soon saw that he must give up or be shot by them.

After being captured by the Indians, Boone quickly learned that they were planning to attack Boonesborough. He knew he must do something to save the women and children there if he could. He hoped that help would come from Virginia, beyond the mountains, if he could hold off the attack long enough.

At the command of the Indians, Boone led them to the saltmaking camp. He had decided that the other saltmakers must also give themselves up to save their families. They went with the Indians to their village without causing any trouble. Three of Boone's men, who were out hunting at the time, were not captured. He knew that they would carry news of the capture back to the settlement, and he hoped that they would have time to get there before the Indians attacked Boonesborough.

The Indians were very proud to have captured Daniel Boone. They looked upon him as the greatest of all the white men. They went



from village to village showing their prisoner. Boone was even made a member of the tribe. He was made the son of Chief Black Fish and given the name Black Turtle.

Boone made the Indians believe he did not care to escape. He whistled at his work. He learned what little he did not already know about a warrior's life, and pretended not to see that he was being watched. He was careful never to shoot better than the Indian braves, because he did not want them to become jealous of him. But he never missed a chance to learn all he could about the Indians' plans to attack Boonesborough. He planned to escape in time to warn his people.

In June, Boone went with Black Fish's party to boil salt at a spring. One day they saw a huge flock of wild turkeys. While the Indians were watching the turkeys, Boone made his escape. He reached Boonesborough four days later. He had traveled 160 miles through the woods. During the hard trip he had eaten only one meal and that was of buffalo meat.





## How Well Did You Read?

If you have read carefully, you should be able to answer these questions:

1. Why did the settlers need salt?
2. How did they get salt?
3. What four jobs did the men at the salt-making camp do?
4. Who did Boone expect would come to the camp?
5. Who did come?
6. What were the Indians planning to do?
7. How many of the saltmakers were not captured?
8. What did Boone know that these men would do?
9. What did the Indians do with Boone?
10. Why did Boone try to behave so well while he was with the Indians?
11. What gave Boone a chance to escape?
12. How far did he travel to get to Boonesborough?
13. In what month did the Indians capture him?
14. In what month did he escape?





### III. THE ATTACK

Daniel Boone had been gone from his people for four and a half months. Mrs. Boone, thinking her husband dead, had returned with their family to the old home east of the mountains. Boone could not go to his wife and children now, however. He must help to save Boonesborough!

There was hard work and trouble ahead for the settlers. They must make the stockade stronger. They must make better gates. Everything must be ready so that they could meet the Indians when the attack came.





It was September before the Indian army reached Boonesborough

It was September before the Indian army of four hundred warriors reached Boonesborough. Boone spent as much time as possible in talking with the Indians. He hoped that help would come from Virginia before the fighting started.

But no help came. The fighting began. The little band of sixty settlers fought bravely to save their homes. The men were always at the walls. They got a few minutes' sleep only when the shooting stopped. The Indians tried to dig a tunnel under the walls. Boone was the first to guess what was happening. The weary settlers immediately began to dig a deep trench from inside the walls to meet the one from the outside. Fortunately, heavy rain began to fall, and the walls of the Indians' tunnel caved in. The pouring rain made it impossible for the Indians to burn the fort.

For ten days the battle went on. It often looked as if the Indians might win. But they could not shoot nearly so well as the white men. At last the Indians gave up. The warriors disappeared as silently as they had come, and Boonesborough was saved.

## Which Heading Is Best?

There are five paragraphs in the part called "The Attack." Below are five groups of headings. Each group is about one of the paragraphs. Read the first paragraph. Then read the three headings in group I. Which of the three headings best gives the main idea of this paragraph?

After I on your paper write the heading which you think is best for this paragraph. Do the same thing for the other paragraphs.

- I. What happened to Boone's family  
Trying to save Boonesborough  
A prisoner for four and a half months
- II. Building the stockade  
Getting ready for the attack  
The strong gates
- III. The Indians arrive  
The Indian army  
Help from Virginia
- IV. The Indians try to burn Boonesborough  
No help from the white men  
The fight with the Indians
- V. The fight goes on  
The white men win  
The best fighters

## Can You Complete These Sentences?

The following twelve words are very important ones in reading. Each of them belongs in one or more of the sentences which are given below. Number your paper from 1 to 22. As you read each sentence, choose the word which you think has been left out of it. Write it after the number for that sentence. *Do not write in this book.*

unless	when	since	but
because	than	if	and
whether	after	or	while

1. You should not eat food that you find in the street \_\_\_?\_\_\_ on the sidewalk.

2. Come this afternoon \_\_\_?\_\_\_ you can.

3. I would rather be well \_\_\_?\_\_\_ sick.

4. \_\_\_?\_\_\_ winter comes, the weather will be colder.

5. No child should miss school \_\_\_?\_\_\_ he has a good reason.

6. I could not come \_\_\_?\_\_\_ I was sick.

7. Wash your face \_\_\_?\_\_\_ hands before you eat.



8. Our bodies mend and grow ---?--- we are sleeping.

9. A great many years have passed ---?--- Daniel Boone lived in Kentucky.

10. ---?--- the rain was over, the children went outdoors to play.

11. The father bluebird has brighter colors ---?--- the mother.

12. It is a long time ---?--- America was discovered.

13. We saw a rainbow ---?--- it was raining.

14. Do not go into deep water ---?--- you can swim.

15. I like candy ---?--- it is sweet.

16. Salt looks somewhat like sugar, ---?--- it does not taste sweet.

17. It gets dark ---?--- the sun has set.

18. We like to go to the circus ---?--- the clowns are funny.

19. Airplanes can travel faster ---?--- trains.

20. People will not trust you ---?--- you do not tell the truth.

21. Do not talk ---?--- people are singing.

22. We shall go ---?--- it rains or not.



## The Thermometer

Many people have thermometers both inside and outside their houses. Thermometers tell the temperature of the places where they are put. Temperature is the amount of hotness or coldness measured by degrees on a thermometer. Thermometers measure temperature by degrees just as scales measure weight by pounds and ounces.

A thermometer is usually made of a slender glass tube with a glass ball on one end, fastened to a frame that protects it.

The glass ball and part of the glass tube are filled with liquid. Either mercury is used, which is a thick silvery liquid, or alcohol that has been colored red to make it show plainly.

Heat makes both mercury and alcohol expand, or take up more space. They contract, or take up less space, when they become cold. When these liquids become warm and expand, they take up more room and rise in the glass tube. Then we say that the temperature rises. When these liquids become cold and contract, they take

up less room and go down in the tube. Then we say that the temperature drops.

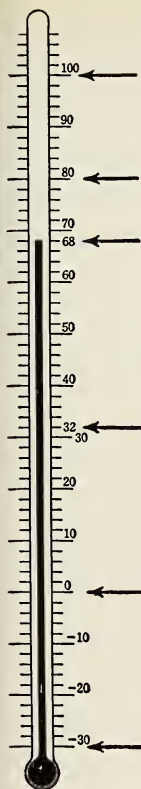
As the weather grows hotter, the mercury or alcohol goes up in the thermometer and we say that the temperature rises. As the weather grows colder, the mercury or alcohol goes down in the thermometer and we say that the temperature drops.

On very hot days the temperature goes very high. Sometimes it rises to 98 or 100 degrees above zero. In some places it rises even higher in the warmest days of summer.

On very cold days the temperature drops below zero. In some parts of the United States and of Canada it drops to 30 degrees below zero or even lower.

Each space on the thermometer stands for two degrees. Look at the picture of the thermometer on page 165. Find 32 degrees above zero. When the thermometer shows 32 degrees above zero, we say that it is freezing weather. We mean that the temperature of the outside air is cold enough to freeze water.

The temperatures shown on the thermometer



*Very, very hot.* In some parts of the United States, the temperature rises even higher than this in the hottest weather. Wear very thin clothes.

*Very warm.* Wear thin clothes.

*Warm.* You will not need any wraps. This is the temperature at which schoolrooms and houses should be kept, if possible.

Water will freeze. Wear warm wraps.

*Very, very cold.* Wear your warmest clothes.

In some parts of the United States, the temperature drops even lower than this in the coldest weather.

on this page are important ones for everyone to know. It is impossible for us to depend upon our feelings to tell temperature. It is important to have thermometers both inside and outside our houses.

Find 68 degees above zero. If possible, the temperature in your schoolroom should be kept at 68 degrees above zero. This is the temperature at which people can do their best work and be most healthy. The temperature in your home, if possible, should never be allowed to go above 70 degrees.

It is important to know the temperature outdoors in order to know the right kind of clothes to wear.

When we write 68 degrees, we write it this way:  $68^{\circ}$ . We write 32 degrees this way:  $32^{\circ}$ . Temperatures below zero are written with a minus sign before them. We write 10 degrees below zero like this:  $-10^{\circ}$ .

If a temperature is above zero, the larger the number, the warmer the weather. When the temperature reaches  $80^{\circ}$ , the weather is much warmer than when the temperature is  $50^{\circ}$  above zero.

If a temperature is below zero, the larger the number, the colder the weather. When the temperature drops to  $-20^{\circ}$ , it is much colder than when the temperature is  $-10^{\circ}$ .

Thermometers measure the hotness and coldness of many things besides the air in our homes and the air outdoors. Doctors have small thermometers with which they measure your body temperature. Such a thermometer is called a clinical thermometer, or a fever thermometer. It measures temperatures even to a tenth of a degree. If you are healthy, your temperature is usually  $98.6^{\circ}$ .

### How Well Do You Understand New Words?

This lesson about the thermometer has a great many new words in it. To understand a thermometer you need to know the meanings of these words. On page 168 you will find a list of words and a list of meanings used in this lesson. If you really understand these words, you should be able to match the words with the right meanings.

Number your paper from 1 to 11. After the numbers, write the letters of the phrases in the second column that give the correct meanings of the words in the first column.



- |                    |                                    |
|--------------------|------------------------------------|
| 1. degree          | a. to take up more space           |
| 2. thermometer     | b. the temperature at which        |
| 3. temperature     | water freezes                      |
| 4. mercury         | c. the red liquid inside the ther- |
| 5. alcohol         | момeter                            |
| 6. expand          | d. getting warmer                  |
| 7. rising tempera- | e. an instrument for measuring     |
| ture               | temperature                        |
| 8. contract        | f. to take up less space           |
| 9. drop in tem-    | g. the amount of hotness or        |
| perature           | coldness                           |
| 10. freezing tem-  | h. an instrument for measuring     |
| perature           | the temperature of the body        |
| 11. clinical ther- | i. getting colder                  |
| момeter            | j. the silvery liquid inside the   |
|                    | therмомeter                        |
|                    | k. the measure used to tell tem-   |
|                    | perature                           |

### Do You Know What Different Temperatures Mean?

You often read in the paper or hear over the radio what the temperature is at a certain time of the day. If you hear that the temperature is  $80^{\circ}$ , what does that mean to you? You might explain it this way: It is a warm day; it is warmer than the temperature at which we should keep our houses; it is a good temperature for growing certain crops.

Below is a list of temperatures. Explain each one

1.  $110^{\circ}$

5.  $98.6^{\circ}$

2.  $-20^{\circ}$

6.  $36^{\circ}$

3.  $32^{\circ}$

7.  $90^{\circ}$

4.  $68^{\circ}$

### Some Interesting Things to Do

1. If you have a thermometer in your school-room, read it once each hour. See if the temperature stays the same all day.

2. Do the same thing at home.

3. Put a thermometer outdoors. Read it once each hour. Notice the difference in the temperature in the morning, at noon, and in the late afternoon.

4. Find out how much difference there is in the temperature in the sun and in the shade.

5. Find the page in a newspaper that gives the temperatures for each hour of the day. Find the report that gives the daily temperatures for large cities in different parts of the country. What can you tell about the weather in these cities when you know the temperatures?



## The Little Brown Bat

### I. LEARNING TO FIND MATERIAL THAT ANSWERS A QUESTION

One morning as some children were going to school, they found a bat. Some of them did not know what it was. As soon as they reached school, they asked their teacher about the bat. The teacher told them that they could find the answers to their questions for themselves. Each child chose one question to look up about the bat. When the answers were brought in, they were told to the whole class.

The questions that the children asked are given below. If you were to make a report to

your class, which question should you choose? Try to find the answer to your question in the story of "The Little Brown Bat." You will have a chance to report your answer to the class. See how much you can find about your question.

Here are the questions that the children asked :

1. Why do bats not fly against things in the dark?
2. Can bats see?
3. Is the bat a kind of bird?
4. What do bats eat?
5. How do bats get their food?
6. Are there any big bats?
7. How does the mother bat take care of her babies?
8. Are bats dirty?
9. Where do bats live?
10. Are bats here all winter?

Did the children ask any questions that are not answered in the story of "The Little Brown Bat"?

Is anything about the bat told in this story that the children did not ask?



## II. A USEFUL ANIMAL

*How the bat looks.* The little animal in the picture is one of the queerest animals in the world. He looks like a little mouse with wings. The bones in his wings look like a three-fingered



hand with a tiny thumb sticking out. The little brown bat is three inches long, and his body is covered with a soft fur.

*The kinds of bats.* There are many kinds of bats. Some are small and some are large. In one country there are bats that have wings which measure five feet from tip to tip.

Our common bats are small. The most common of all is the little brown bat.

*The eyesight of bats.* Have you ever heard anyone say "blind as a bat"? There is no truth in that saying, because bats have very sharp eyes.

*How the bat finds his way in the dark.* Bats have wonderful wings. These wings have nerves in them that feel every tiny movement of the air. These nerves tell the bat when he is near any object. That is why bats can fly swiftly through trees at night without touching a twig.

A man tried a very interesting experiment with bats. He covered the eyes of some bats with wax so that they could not see. He stretched many wires back and forth in a room in every direction. The spaces between the wires were very small. Then he turned the bats loose.

They flew all about the room. Although they could not see, not one of them struck a wire. When they came to a place where the wires were close together, they drew in their wings as they flew, and slipped through the openings.

*How the bat catches insects.* With his little pink mouth wide open, the bat flies through the air. He scoops into his mouth the insects that are in his path. Sometimes, as he flies, he snatches insects from flowers or twigs. He has still another way of getting his supper. He uses the thin skin between his hind legs and tail for a net. After the insects are caught, he reaches down and eats them.

*The kinds of insects that bats eat.* Bats are our friends. They eat hundreds of harmful insects, such as moths and cockroaches. One insect which they eat by the hundreds is very harmful to man. This insect is a certain kind of mosquito that carries the germs of a very bad fever called malaria. In places where there is a great deal of malaria the bats are protected. Men build places for them to stay. These places are called bat roosts.

Most of the insects that the bat eats hunt for their food at night. That is why you will see bats just before it gets dark. They come out every night to search for these insects that are flying or crawling about.

*How bats keep clean.* Some people think that bats are dirty animals, but they are really very clean. You should see a bat wash his wings! He takes hold of a wing with his sharp little teeth and pulls and stretches and licks it until you would think it might break. He washes his face with the front part of his wing. He even washes his hind feet. He licks them until they are clean.

### How Well Do You Remember?

Without reading the lesson again, see how many of these blanks you can fill in without making a mistake. *Do not write in this book.*

1. The bat looks like a \_\_\_?\_\_\_ with \_\_\_?\_\_\_.
2. The little brown bat's body is about \_\_\_?\_\_\_ \_\_\_?\_\_\_ long.
3. The bat's body is covered with \_\_\_?\_\_\_.
4. There are \_\_\_?\_\_\_ kinds of bats.

5. The most common bat is the \_\_\_?\_\_\_  
\_\_\_?\_\_\_ bat.

6. Bats have \_\_\_?\_\_\_ eyes.

7. The \_\_\_?\_\_\_ in the bat's wings tell him  
when he is near an object.

8. As the bat flies, it scoops \_\_\_?\_\_\_ into  
his mouth.

9. Some of the insects that the bats eat are  
\_\_\_?\_\_\_, \_\_\_?\_\_\_, and \_\_\_?\_\_\_.

10. In places where there is a great deal of  
malaria, men build \_\_\_?\_\_\_ \_\_\_?\_\_\_ for the  
bats.

11. The little brown bat flies at \_\_\_?\_\_\_ in  
search of \_\_\_?\_\_\_.

12. Bats keep their bodies very \_\_\_?\_\_\_.

### III. INTERESTING HABITS OF BATS

*Where bats live.* Bats like to live in caves. If  
they cannot find a cave, they will creep into a  
dark corner of a barn or into a hollow tree.

*The bats of Carlsbad Caverns.* One evening a  
cowboy named Jim White was riding in south-  
eastern New Mexico. Far off he saw something  
that looked like a great cloud of smoke rising







out of the ground. He rode to see what it was. Millions of bats were leaving a cave to hunt insects during the night! These bats led Jim White to discover Carlsbad (kärلز'bäd) Caverns, the largest and most beautiful cave in the world.

The bats that led Jim White to discover Carlsbad Caverns live in one big room of the cave. Although thousands of visitors see the cave each year, no one visits the room that is the home of the bats. It is believed that between three million and five million bats live there.

It is a wonderful sight in summer to watch the bats of Carlsbad leave their roost in the evening to go insect-hunting. At first only one or two bats fly out and circle about. Then for four hours bats fly out of the cave. Their small voices snap and squeak as they start toward Black River, many miles away, where they will feast upon mosquitoes and other insects during the night. At dawn they return to the cave, and they sleep during the day.

*How the mother bat cares for her young.* What do you think the mother bat does with her babies when she flies in search of food? She takes them with her. They cling to her body, and away they all go through the air. When the babies are about five weeks old, they are too big for her to carry easily. Then she hangs them up on the bat roost, or on a twig, and flies away to

get insects for them. She feeds the little bats until they are old enough to take care of themselves.

*How the bat sleeps.* How should you like to sleep hanging by your toes? That is the way bats sleep. They have long, sharp claws on their tiny feet. When they are ready to go to sleep, they hang themselves up by these claws and shut their eyes. Sometimes they hang by one toe and the hook of one wing.

*How bats spend the winter.* In parts of the country where the winter is cold, bats must find a cave to live in during the months when there are no insects for them to feed on. They sleep all winter, living on the fat they have stored in their bodies during the warm summer, when they feasted upon insects. When spring comes, the bats wake up. They have used up so much of their fat that they have lost one third of their weight. But with plenty of insects to feed upon, the bodies of the bats soon become fat and their fur becomes smooth and shiny once more.

## Proving Your Answer

Read these sentences and decide which are right and which are wrong. Find and read the sentences in the story that prove that you are correct.

1. Bats live only in barns.
2. The Carlsbad Caverns are in Arizona.
3. The Carlsbad Caverns are large and beautiful.
4. Many people visit the room where the bats live.
5. Several million bats live in this cave.
6. The bats make no noise as they fly from the cave.
7. They sleep in the cave during the night.
8. The mother bat carries her babies with her until they are five months old.
9. Baby bats are able to take care of themselves as soon as they are born.
10. The little brown bat usually sleeps hanging by his toes.
11. Bats sleep during the months when they can find no insects.
12. Bats get thin while they sleep.

## Which Should You Do?

Here are a number of questions about accidents. Read these questions silently. Answer each by Yes or No. Be ready to give a reason for each of your answers.

1. Should you play with matches?
2. Should you climb electric-light poles?
3. Should you put a wire screen before an open fireplace?
4. Should you look both ways before you cross the street?
5. Should you play where men are digging ditches?
6. Should you play where houses, stores, or other buildings are being built?
7. Should you decorate a Christmas tree with lighted candles?
8. Should you pick up a lighted firecracker to see why it did not go off?
9. Should you leave pails, pans, or dishes of hot water near the edge of a table or a stove?
10. Should you keep pins, knives, and scissors away from little children?



11. Should you look both ways when you cross a car track?

12. Should you roller-skate in the street?

13. Should you throw banana peelings on the sidewalk?

14. If your hat blows into the street, should you look up and down the street before you go after it?

15. Should you play where buildings are being torn down?

16. Should you ever start a fire with gasoline?

17. Should you run with sharp-pointed objects in your hand?

18. Should you keep pins, needles, and tacks out of your mouth?

19. Should you play in the street?

20. Should you get off a bus before it stops?

21. Should you touch wires hanging from trees or poles?

22. Should you ever point a gun at anyone?

23. Should you turn off electric lights when your hands are wet?

24. Should you put money into your mouth?



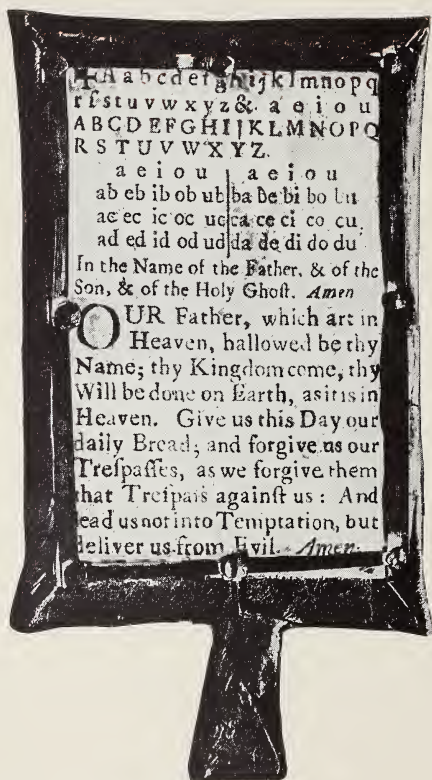
## Early Colonial Schools

Three hundred years ago there was no United States. There were only a few scattered settlements along the Atlantic coast. Groups of these settlements were called *colonies*, and children of that time were called *colonial* children. They went to colonial schools, which were very different from the schools of today.

Almost every boy and girl who goes to school today has a desk of his own and many different kinds of books. Long ago when the colonial children went to school they had only a few books to use. They did not go to school in a fine big schoolhouse.

They did not have seats and desks like yours. They sat on stools or on benches. There were no backs to these seats. How tired the little children would get! They had to sit very still and straight. If they did not pay close attention to their lessons, they might receive a sharp rap on the head or a box on the ear.

The early schools were heated by a fireplace. You would think it very strange if you had to





furnish wood to be burned at school. That is what many colonial children had to do. They had to carry an armful of wood to school so that they might be kept warm. The children who did not bring any wood had to sit farthest from the fireplace.

One book from which the colonial children learned to read was called a hornbook. This was really not a book. It was a lesson leaf fastened to a thin block of wood. In order that the lesson leaf might not get lost or torn, it was covered with a thin sheet of horn. In the picture on page 186 do you see the handle by which the child could hold his book?

Another book that these children used was *The New England Primer*, a tiny book about two inches wide and three inches long. A book this size would be smaller than a postal card.

The lessons in *The New England Primer* began with the letters of the alphabet. These were followed by syllables to be sounded, such as *ab*, *eb*, *ib*, *ob*, *ub*. After these, came lists of short words followed by longer words. These words were divided into syllables so that the children



could pronounce them. The first part of *The New England Primer* was much like the horn-book, which you can see on page 186.

Following this first part were twenty-four short rhymes with a picture for each rhyme. Here are some of the rhymes from *The New England Primer*. Can you read them? The



In Adam's Fall  
We sinned all.

Thy Life to mend,  
This Book attend.

The Cat doth play,  
And after flay.

A Dog will bite  
A Thief at Night.

An Eagle' flight  
Is out of fight.

The idle Fool  
Is whipt at School.

second word in the second line is *sinned*. The first letter of this word is an old-fashioned *s*. The same kind of *s* is used to begin the word *slay* in the sixth line.

In this little primer were also the Ten Commandments and the Lord's Prayer, as well as other religious teachings. Some of the colonial children knew this primer by heart after they had been in school a short time.

The little children sometimes went to school in the kitchen of a woman's house. The school was taught by a woman. It was called a Dame School. Some of the children who went to these schools were only two or three years old. Here they learned to read. They began by learning the alphabet.

One dame had a way of teaching the alphabet that almost any child would like. She made gingerbread letters; and, when a child had learned a letter in print, he could eat the gingerbread letter.

When the children were older, they left the Dame School and went to a schoolmaster. At first only the boys were allowed to go to the schoolmaster. They had to work very hard. When they did not get their lessons, they were whipped.

## Did You Find Out These Things about Colonial Schools?

1. What kind of seats did colonial children have?
2. For what things were the children punished?
3. What punishments were they given?
4. How were the schools heated?
5. How was a hornbook made?
6. How large was *The New England Primer*?
7. What was the first lesson in *The New England Primer*?
8. What other lessons were in this book?

## Can You Make Summary Sentences?

This lesson has told you many interesting things about colonial schools.

Write five summary sentences that tell about the lesson. A summary sentence tells about an important point in a very few words. Here is a sample :

1. The children often had to sit on seats that were very uncomfortable.

## Learning to Use an Index

If you want to find material quickly in a book, you should use the index. The index is found at the back of a book.

On the next page are words taken from the Index of this book. These words point out topics told about in this book. Which word begins with *B*? Which word begins with *C*? How many words are there beginning with *E*? Find the words beginning with *S*. What words come after those beginning with *S*? How are the words in an index arranged?

See how quickly you can find these words on page 192: *Eskimos, lion cub, elephants, temperature, sheep, graphs, safety, saltmaking, thermometer.*

The words in an index have numbers of pages after them that tell where you will find something about each subject.

Find the word *Ivory*. What number is after *Ivory*? This means that on page 114 in this reader you will find something about ivory.

## Index

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    food of, 174-175  
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Find the word *Eskimos*. The numbers after *Eskimos* are written like this: 45-60, 294-314. This means that pages 45-60 and pages 294-314 will tell you about Eskimos.

Find the word *Elephants*. The numbers after *Elephants* are written like this: 86-119. This means that you need to read 34 pages to read all the material about elephants. Below the word *Elephants* there are nine other topics. Read them. These are called *subtopics*. They tell you which pages to read to find certain things about elephants. If you wish to read about the value of elephants, find the subtopic *value of* under the word *Elephants*. After *value of* you find these numbers: 111-114. Read those pages to find facts about the value of elephants. If you want to read about the age of elephants, what page should you read?

## Using an Index

### I

Copy on a sheet of paper the words in the list on page 194. Find each word or group of words in the index page on page 192. After each word write

the number of the page or pages in this reader where you can find something about each subject.

- |                |                  |
|----------------|------------------|
| 1. Sheep       | 6. Ivory         |
| 2. Map-reading | 7. Outlines      |
| 3. Safety      | 8. Lion cub      |
| 4. Graphs      | 9. South America |
| 5. Desert      | 10. Saltmaking   |

## II

Find the word *Bats*. Write the numbers of the pages you would read to find these things about bats :

1. How bats spend the winter
2. What kinds of bats there are
3. What their houses are like
4. How they care for their young
5. What they eat

## III

Below are some questions to answer by using the Index in this book. In each question, choose the important word that you would look for in the Index. Look at the subtopics to find the pages you would read to answer these questions. Write the numbers of these pages.

1. How long do elephants live ?
2. How can you help to take care of public property ?
3. What should you do if you have touched poison ivy ?
4. What materials are used in making soap ?
5. How did Daniel Boone act when he was a captive of the Indians ?
6. How large are elephants ?
7. What are thermometers used for ?
8. What is one way of making lye ?
9. Why do people dislike rats ?
10. How were schools heated in the early colonial days ?
11. What are the uses of seals ?
12. How do birds help us ?
13. What are good ways of getting rid of rats ?
14. How were candles used for telling time ?
15. In what way is poison ivy different from Virginia creeper ?
16. What are the uses of Roman numerals today ?
17. What is one way of making an outline ?
18. On what page will you find a map of the Congo River region ?



## A Jungle Boy Gets Lost

This story is taken from the book *Red Jungle Boy*. It is only one of many interesting stories that the book tells about this Indian boy. His name was Dohobare (dō hō bār'ě). He lived in the jungles of South America. His home was on the bank of a river that flows into the great Amazon. The country where Dohobare lived is near the equator and is very hot.

### I. DOHOBARE LOSES HIS WAY

Dohobare took his bow and arrows and started down the path to the jungle to hunt for meat for his dogs. As he passed some flowers along the

path, a bee flew up. It flew for some time in circles, higher and higher, and at last flew straight toward the jungle. "I will follow the bee home and get the honey, as Father often does," said Dohobare to himself. So he started running after the bee. "I will have all the honey I can eat and can bring some home to Mother," he kept thinking, as he ran on after the bee.

The bee flew slowly, for it carried a heavy load. When it entered the jungle, it flew high over the trail, but still Dohobare followed. On and on went the bee, and on and on went the boy. The trees and vines became thicker and the trail narrower, and it was hard for him to keep his eyes on the bee. There were thorns, and he had to go carefully. He lost the bee. But he knew in what direction it was going and thought that he could follow it; so he went on. He heard things moving in the leaves and bushes. Once he nearly stepped on a snake, but he was gone before it had time to strike.

Several times he saw a bee flying in the direction in which he was going. "There goes the



bee," he would say. Of course he could not be sure that it was the same bee, but he thought it was, and he kept on going. He could go all day and never get tired. At last he came to an old log, with bees flying about it. "There is the nest," he whispered, and moved carefully toward it.

Dohobare came closer to the log. He watched the little black bees. They were going in and out of what looked like a small dead branch on the log. "Stingless bees; good," he said. He ran to the log and broke off the little branch, which was not a branch at all but a tube that the bees had made leading into the hollow log. Only bees that do not sting make these tubes, and Dohobare knew it.

Dohobare cut a hole in the log with the point of an arrow, and out poured the bees. They flew all over him. They crawled through his hair and about his eyes and ears and nose. He could hardly stand it. He pulled leaves and stuffed them in his ears. He had to keep wiping the bees off his face, but he got the honey, leaving only enough for the bees.



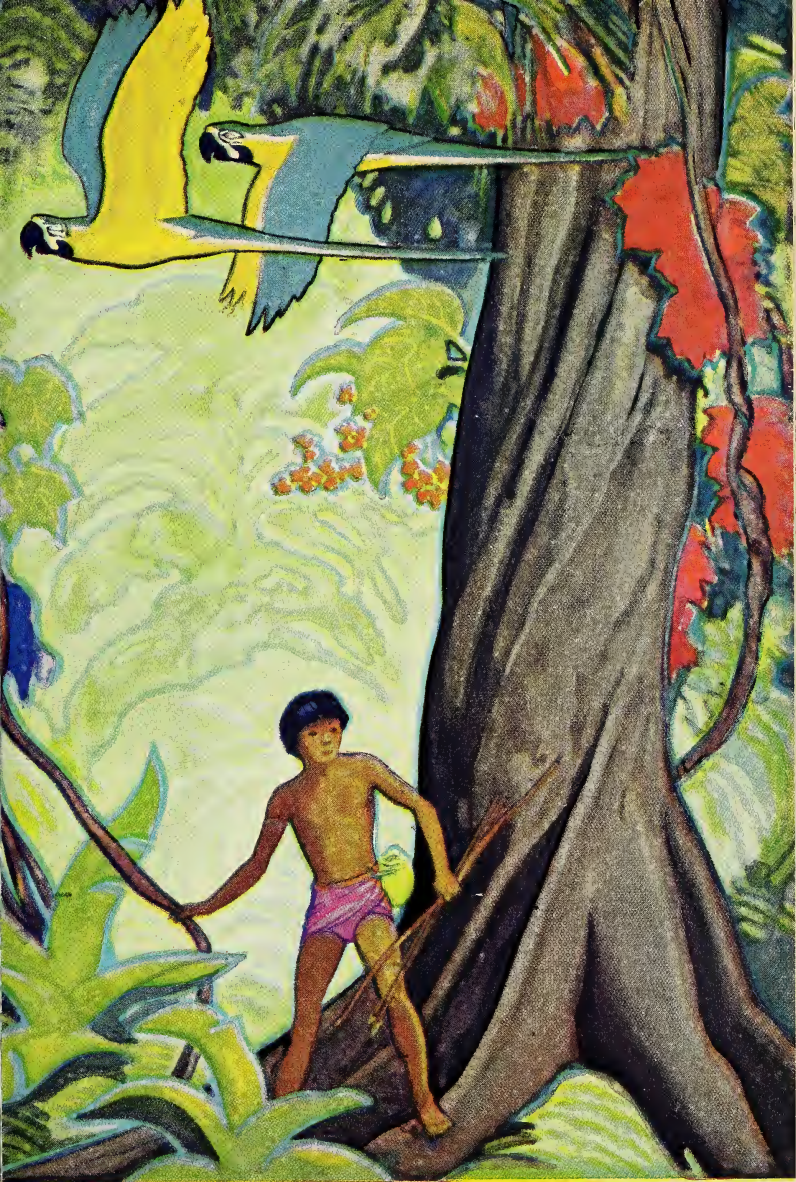
Then he sat down on the farther end of the log and kept as still as he could until the bees left. He tried to eat some of the honey, but it made him thirsty. So he decided to take the honey home. He wrapped it in a large leaf and tied it around his waist.

Now which way was home? He saw a trail, but he knew that he had not come that way. The right way was through those bushes, he felt sure, and so he plunged into them and hurried away.

Dohobare came to several trails as he made his way through the jungle, but they all looked alike. He kept telling himself that he must go by direction and not follow trails. It was late in the afternoon, and he was far from home.

At last he came to an open space with tall grass and many anthills, some as tall as he was. Dohobare did not remember passing an open place in the jungle before. He saw nothing that he recognized, but he kept on going. At last he came to a log that looked like the one from which he had taken the honey. Why, it was that log! He had been going in a circle.





Which way was home?

Dohobare knew now that he was lost. He tried to think. How had he got lost? Father never got lost when he followed the bees. "I am not a man after all," he thought sadly.

"What would a man have done?" he asked himself. Then he remembered. Why, of course. Father always broke little twigs on bushes and trees as he went along, to mark the trail. How foolish Dohobare had been! He wanted to cry, but he would not do that.

Just then he heard a noise like someone pounding. He heard it again. He looked up and saw a large monkeynut tree. He knew that there must be monkeys in the tree, pounding nuts against the limbs to break the shells. A nut fell. He cracked it and tasted the dry center, but it made him more thirsty than ever.

He thought of his pet monkey, and decided to take some nuts home to him. He picked a few nuts from the ground. Then he pulled off a palm leaf and braided it about the nuts into a very good basket. It was so late that Dohobare knew that he would have to stay there all night and try to find his way home in the morning.



## How Well Did You Read?

Number your paper from 1 to 11. After each number write the word or words which have been left out of the sentence.

1. Dohobare lived in the jungles of ---?---  
---?----

2. He started toward the jungle to hunt for  
---?--- for his dogs.

3. When he saw the bee, he decided to try  
to get some ---?----

4. The bees had their nest in a ---?----

5. Dohobare knew that they were ---?---  
bees.

6. Only bees that do not ---?--- make  
tubes leading to their nests.

7. He did not know which trail led toward  
---?----

8. When he got back to the log, he knew he  
was ---?----

9. He should have marked his trail by break-  
ing little twigs on bushes and ---?----

10. He was near a large monkeynut ---?----

11. He knew he would have to stay in the  
jungle until ---?----

## II. A NIGHT IN THE JUNGLE

It was growing dark now. "Where shall I sleep?" he asked himself. And sure enough, where should he sleep? Thorns from the thorn palm were scattered over the ground. Ants crawled everywhere. There might be snakes and poisonous spiders under the leaves. Dohobare could walk through the jungle, for the soles of his feet were as tough as leather, but sleeping on the ground was different.

All at once Dohobare's sharp ears caught the sound of animals running. The sound came





nearer. He heard grunts. It was a herd of peccaries (pěk'a rīz), the little wild pigs of the South American jungle. They were running as if something had frightened them. One of the most dangerous things to meet is a herd of angry peccaries, and Dohobare knew it. They would tear him to pieces with their sharp tusks, and trample him under their hard little hoofs.

There is only one way to escape peccaries—climb a tree. There was no time to lose. Dohobare dropped his basket of nuts and ran for the monkeynut tree. He caught the ropelike vines

that grew about the trunk, and quickly climbed to the first limb. He was not a moment too soon. He could hear the peccaries crashing through into the trail at the foot of the tree.

Dohobare sat on a limb of the monkeynut tree and watched the peccaries below. How glad he was that the tree was large and the limb high! He heard them rooting and grunting about the tree. Once he caught sight of sharp white tusks. Why had they stopped under his tree? Did they know he was there? Were they going to keep him up the tree for hours, as they had done once to a big boy he knew in his village? Many times he had heard the story of how this boy shot a peccary and quickly climbed a tree. The other peccaries were so angry that they tried to tear down the tree. They even stood on their hind legs and tried to reach him with their tusks. After a long time some of them got hungry and went to look for food, but they kept coming back. They always left two or three under the tree to watch him. They kept the boy there all day before they finally went away and he could get down safely.

Dohobare sat very quietly and looked down at the peccaries. They were tearing his basket of nuts to pieces. He hoped they would not hurt his bow and arrows, which he had left leaning against the tree. The peccaries were making a great noise now, eating nuts. At last, when the nuts were gone, they went away. "They did not know that I was here," said Dohobare to himself, with a sigh of relief.

After the peccaries had gone Dohobare sat on the limb and wondered whether he should ever find the way back home. He had never been so far in the jungle before; probably no one ever had. Dohobare looked about him. How tall the monkeynut tree was! He decided to climb to the top of the tree, and perhaps he could see the fires at home. He began to climb.

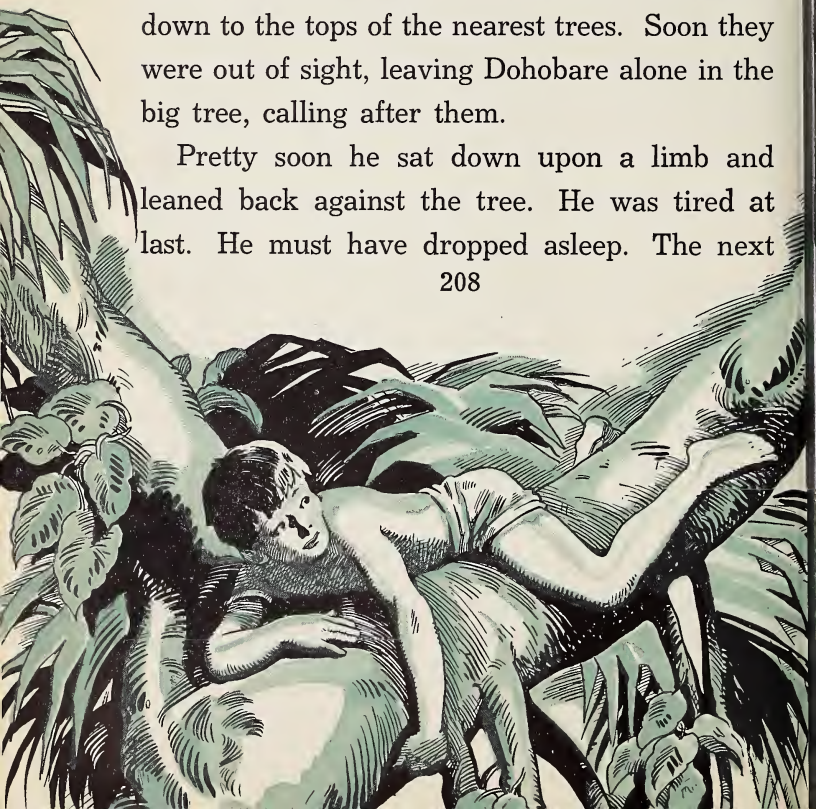
Just when he had climbed high enough to look over the tops of the palm trees, he heard a shrill whistle. This was followed by more whistling and the falling of nuts. The monkeys had discovered him and were leaping through the branches. They were slender gray monkeys and looked just like his little pet monkey at home,



only they were larger. When Dohobare thought of his little pet, it made him homesick.

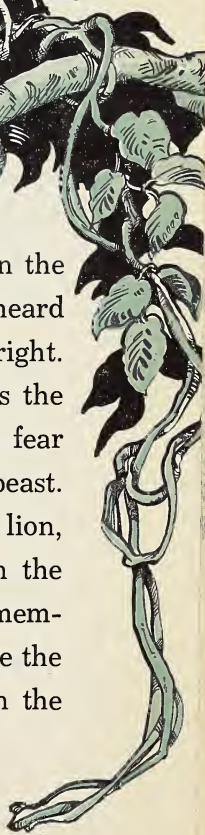
He wished the monkeys would not go, and he began to whistle softly like a monkey. Dohobare could imitate animals and birds and he often called them to him. But monkeys are timid little things. One monkey had seen him and had given the signal, and now they were all frightened. They ran to the ends of the limbs and leaped down to the tops of the nearest trees. Soon they were out of sight, leaving Dohobare alone in the big tree, calling after them.

Pretty soon he sat down upon a limb and leaned back against the tree. He was tired at last. He must have dropped asleep. The next





thing he knew he was sitting straight up on the limb of the tree listening. He thought he heard a jaguar's (jäg'wärz) call. Yes, he was right. He heard it again, nearer this time. It was the deep, hunting call of the jaguar. A new fear came over him. The jaguar is a dangerous beast. It is larger and stronger than a mountain lion, and its teeth and claws are terrible. Even the men are afraid of the jaguar. Dohobare remembered how they always built big fires to scare the jaguars away when they took long trips on the river and slept on the banks.



But Dohobare had no fire. He was up in a tall tree, but that would not protect him. A jaguar is as much at home in a tree as on the ground. Dohobare had heard the men tell how the jaguar lies on limbs over trails and jumps on animals that come along.

Poor Dohobare! He heard the deep call again right under the tree. His arrows were there. Would the jaguar smell him? He hardly took a breath. He waited. Not a sound; for most jungle animals and jungle people make no sound when they walk. Then the call came again farther away, and Dohobare knew that the jaguar was after the peccaries and not after him. He took a deep breath and leaned back against the tree. He was safe once more.

Dohobare felt very small in the big tree in the jungle, and very lonely. He peeped through the branches at the sky. He saw a star that he knew. It seemed like an old friend, and he was not so lonesome now. He kept thinking of home for a long time, but at last he dropped off to sleep.

## How Carefully Did You Read?

Answer as many of the following questions from memory as you can. Then turn back to the part of the story that answers each one. Reread the story in order to see whether your answers were correct and to find the answers to the questions that you did not know.

1. What are four reasons why Dohobare could not sleep on the ground?

2. What are peccaries?

3. How would the peccaries harm Dohobare?

4. What was the only way to escape from the peccaries?

5. What three things did he leave on the ground when he climbed the tree?

6. Why did he climb still higher in the tree?

7. Why did the monkeys go away?

8. What woke him up?

9. Could the jaguar hurt him while he was in the tree?

10. What do men do in the jungle to keep jaguars away?





Dohobare heard the deep





### III. DOHOBARE IS FOUND

When Dohobare awoke, it was daylight. Two great red-and-black parrots flew high over the tree tops. Dohobare watched them. They were going to the river to drink. He would go in that direction too, he decided, for he knew that toward the river would be toward home.

Of course Dohobare could not be sure about the birds. He might have slept so late that they were returning from the river, but he thought not. Dohobare tied the honey about his waist. He was much too thirsty to eat. He reached about for wet leaves and drank the dew from them, for the dews are like rains in this country. Then he climbed down the tree and started to follow the birds.

Dohobare made his way through the jungle until he came to an animal trail. Which way should he turn? If this were a tapir (tā'pēr) trail, it would lead toward the river, but which way? He did not know, but he took the trail leading more nearly in the direction in which he had been going.

At last, when the sun was high above his head,

he saw something ahead of him. He stepped quickly out of the trail, and, hiding in the bushes, crept close to it. There he saw a mother tapir eating leaves, and a little one beside her. Dohobare had never seen a baby tapir before; so he looked at it for a long time.

These tapirs were very queer-looking animals. The mother tapir was as tall as a donkey, had a body like a rhinoceros, a neck like a horse, and a nose somewhat like an elephant's trunk only much shorter. But Dohobare did not think of these things, for he had never seen a rhinoceros, nor an elephant, nor a horse. He liked the big brown tapir, and he thought that the little one with spots and stripes was pretty.

Now he could find which way the river was. He would scare the tapir, and it would run toward the river, as tapirs do when frightened. So Dohobare shouted, and the mother tapir and the little one ran ahead and out of sight. Then Dohobare knew that he was going in the right direction. The river was not far away, for the mother tapir would not bring her little one far from the river.





Dohobare hurried along the trail the way the tapirs had gone. He was so thirsty that all he could think of was water. At last he reached the river.

Dohobare knew the jungle too well to run and throw himself on the bank and drink. Thirsty as he was, he stopped and looked about. First he looked above him. There might be a jaguar on a limb up there. But he saw none. Then he looked carefully at the hanging vines. Sometimes a large snake will hang down like a vine over a trail, drop on an animal that is drink-



ing, wrap itself around it, and crush it. But he saw none. He looked one way and then the other. He saw an alligator sunning itself on the bank. He knew that there was another one somewhere near. Sure enough, there were its eyes sticking out of the water.

Dohobare stooped and dipped up water in his hand and drank. Again and again he dipped up water and drank, but he kept watching the alligator's eyes. They disappeared. Quickly the boy stepped back from the water. "No, you don't, Mr. Alligator! I know your trick!" he thought. An alligator often watches until an animal goes to drink and silently swims under water until close to it. Then the alligator gives



a sudden slap with its powerful tail, knocks the animal down, pulls it under until it drowns, and then eats it. Dohobare knew this and knew that he was safer back on the bank.

Dohobare was hungry, but there was nothing to eat except the honey he had found. He wanted to take that to Mother. He went back into the jungle to look for food. He took a bite of a yellow fruit growing on a tree, but it gave him pains in his stomach. There were small coconuts, but they would taste like wood. Even monkeynuts are not good for food.

There were no berries, no fruit, and no nuts fit to eat. Finally Dohobare found a very young palm tree of a certain kind. He cut off the top, peeled it, and ate the heart. It was tender and good.

Then he left the trail and pushed through to the river again. Somewhere along the river was home. If he only had a canoe! Why didn't a canoe come along? But the men fished up the river. They would not come this way, and no one could hear him if he called. Wait a minute. What was that? His sharp ear caught a faint

sound. Surely it was the sound of a paddle. He heard it more clearly now. Then he saw the long end of a canoe coming around the bend in the river. A man was paddling. It was Father.

How surprised Dohobare was when the big canoe came near! There were Mother, little sister, the dogs, and the birds. Everything was just as if they were going on a long journey. And so they were.

Poor Father and Mother! They could not understand why Dohobare had not come home all day yesterday, or last night, or today. Had he drowned in the river? But he could swim too well for that. Had he gone into the jungle and been killed by some beast? Surely not. Had he crossed the river and been killed by enemies? They hoped not. But what had happened to him? They had decided to go down the river to the place where the medicine man lived. He was wise. Surely his magic would bring back their boy.

Now they had found him. They were surprised and happy, but they asked him no questions. As Dohobare stepped into the boat, he

untied the leaf of honey and gave it to Mother. "Honey," he said. Now they would understand. Mother smiled and gave him her paddle and her place in the boat.

Dohobare had never been so happy in his life. Father and Mother knew at last that he was almost a man.

*Elizabeth K. Steen.*

### What New Things Have You Learned about Life in the Jungle?

1. Can you tell how Dohobare got out of the jungle?

a. How did Dohobare find the river?

b. Why did Dohobare not get a drink as soon as he reached the river?

c. What three animals might have harmed him as he drank?

2. What was the jungle itself like?

a. What are the plants like and how do they grow in the jungle? Why?

b. Are there many or few animals in the jungle? Why?

c. Why was it easy for Dohobare to get lost in the jungle?

## Can You Tell Which Is Right?

The sentences below tell what certain children did when they were in public places. Read the sentences and decide which children did the right thing and which children did the wrong thing.

1. A boy who was writing a postal card at the post office shook ink on the floor.

2. A child bought some candy wrapped in paper. He threw the paper into a rubbish can that was on a street corner.

3. Two boys wrote their names on the wall of the schoolhouse.

4. A little girl carefully cleaned her shoes on the mat before she went into the public library.

5. Some children picked up papers that were scattered over the schoolyard.

6. A boy who was eating an orange put the peeling into a rubbish can.

7. Some children who were playing in the schoolyard one evening broke off the top of a little tree. They wanted it for a whip.

8. Some boys tried to turn on a fire hydrant.

9. A girl who was writing at the board dropped a piece of chalk and did not pick it up.

10. Several children went to a picnic at the park. When they had finished eating, they picked up all the paper and scraps of food and put them into the rubbish can. They poured water on their campfire to put it out.

11. Two children cut their initials in the tops of their desks.

12. A boy returned a library book that he found on the street.

13. A boy at school said : "I don't care if I do scratch my desk. I don't have to buy the desks."

14. A child picked up some glass which was on the sidewalk. He put it into a rubbish can.

Take a sheet of paper. On the right side of the paper, at the top, write the word *Right*. On the left side of the paper, at the top, write the word *Wrong*. Under *Right* put the numbers of the sentences that tell what the children did that was right. Under *Wrong* write the numbers of the sentences that tell what the children did that was wrong.



## How Well Do You Remember?

You should study a lesson until you understand it. That is one of the very first steps in remembering. Even then you will forget a part of what you have learned. By the end of only one day you will have forgotten a good deal. By the end of two weeks you will have forgotten much more. By the end of a month you will have forgotten a large part of what you knew when you finished studying.

One way to remember important facts that you have read is to review them from time to time. First, you should see how many facts you can recall, or think of again. Then you should read the lesson again to correct any mistakes that you have made and to learn any facts that you may have left out.

This lesson will show you how well you remember what you have read about poison ivy. Try to answer the following questions. Then turn back to the lesson on page 76 to see how many of your answers are right. Study again any of the facts that you have forgotten.

What advice about poison ivy should you give to these people:

1. Someone who is going to spend the day in the woods?
2. Someone who, by accident, has picked a leaf of poison ivy?
3. Someone who says he is afraid to touch a Virginia creeper?
4. Someone who is afraid of every vine he sees?
5. Someone who has poison ivy growing in his yard?
6. Someone who has blisters on his skin from ivy poisoning?
7. Someone who says he lives in a state where there is no poison ivy?
8. Someone who washes with toilet soap after he has been near poison ivy?
9. Someone who is going on a picnic on a very warm day?
10. Someone who says that he is not afraid of poison ivy?



## Our Enemy the Rat

### I. WHY PEOPLE DISLIKE RATS

There are no other animals that people dislike so much as rats. There are three reasons why people dislike rats: first, they are filthy; second, they spread disease; third, they destroy property. People who know a great deal about rats say that they have not a single good habit.

*In what ways are rats filthy?* Rats are filthy in every way. They live in dirty places. The more tumbledown a house is, the better rats seem to like it. Sometimes they even live in old sewers. They eat everything. Rats that live in houses find some of their food in garbage cans.

They come straight from the garbage can to the kitchen, or to the food in the bakery, grocery, or meat market. Their fur is never clean. It usually has fleas in it.

*How do rats spread disease?* It is not strange that such filthy animals should spread disease. Rats carry many disease germs in the filth on their bodies. We may catch some of these diseases by eating food which rats have touched. Bubonic plague (bū bŏn'ík plāg), a dreadful disease, may be carried by the fleas that live in the fur of rats. Some of the most terrible diseases are spread by rats.

### Test Your Reading

1. Give three reasons why people dislike rats.
2. What do people who know a great deal about rats say about their habits?
3. What are three ways in which rats are filthy?
4. Why should we keep garbage cans covered?
5. Why should we keep our food where rats cannot touch it?
6. In what ways do rats spread disease?
7. What do rats eat?

*How do rats destroy property?* Few pests destroy more property than do rats. They are one of the farmer's worst enemies. They sometimes dig up the corn just after it is planted. Then the farmer has to plant his corn again. They sometimes eat the corn when it is growing. They are very good climbers and will climb up stalks and gnaw both the stalks and the ears of corn.

But they do the most damage after the farmer has stored his grain. Then the rats eat bushels of it. A farmer said that one year the rats destroyed one fourth of his corn. A single rat may eat fifty pounds of grain in a year and destroy much more.

Rats eat or spoil a great deal of food in stores. The storekeeper has to work very hard to keep rats away from the food which he has to sell. In buildings where there are rats, one rat may destroy five dollars' worth of food every year.

Rats destroy large amounts of food in ships. Often a single ship will have four or five hundred rats in it. Ships that carry food almost always lose a part of the food because of rats.



People who raise chickens find that rats are among their worst enemies. No other animal destroys so many chickens and eggs. If there are many rats around a barn or a chicken house, they will kill many of the young chickens. Rats also eat eggs. They either eat the eggs where they find them or carry them to their own nests.

However, it is not only food that rats destroy. They eat holes in clothes and in rugs. They gnaw holes in furniture and in the floors of houses.

Sometimes rats set buildings on fire. They carry matches to their nests. There they chew the heads of the matches and in that way set fire to their nests. Since these nests usually have bits of paper in them, they are easily set on fire.



Sometimes as a rat is carrying a match to his nest, he scratches the head of the match against a stone or a wall. This lights the match. If the lighted match drops where there are pieces of paper or small bits of wood, a fire is almost sure to start.

Rats have been known to gnaw even the covering from the outside of an electric wire. If this uncovered wire touches anything made of wood, it may start a fire.

### Can You Locate Information?

1. Find two sentences that tell how rats destroy corn in the field.

2. Find one sentence that tells how much grain one rat may eat in a year.

3. Find one sentence that tells why the storekeeper hates rats.

4. Find one sentence that tells how many rats one ship may carry.

5. Find a sentence that tells in what two ways rats make trouble for people who raise chickens.

6. Find one sentence that tells why a rat's nest is easily set on fire.

7. Find a sentence that tells when rats do the most damage to the farmer's grain.

8. Find three sentences that tell what damage rats do by gnawing.

### Write a Summary Sentence for Each Paragraph

The part called "How do rats destroy property?" begins on page 227. It has eight paragraphs. Number your paper from 1 to 8. Each number will stand for a paragraph. Beside each number, write a summary sentence that tells one way in which rats destroy property. This might be your first sentence for the first paragraph :

1. Rats destroy corn in the fields.

Make up a sentence for every paragraph.

## II. HOW TO GET RID OF RATS

How can we get rid of rats? There are four ways. First, we can see that they do not find places in which to hide themselves and their nests from their enemies. Second, we can try to keep them from getting any food to eat. Third, we can see that rats are killed wherever they are found. Fourth, we can protect their enemies.

*How can we prevent rats from having a place in which to hide?* The best way to get rid of rats is to build houses, barns, stores, and other buildings in such a way that the rats cannot get into them. If rats cannot find places to build their nests, they cannot raise young rats. If they do not have places in which to hide, their enemies are better able to kill them.

It is very difficult to keep rats out of buildings. Most barns and houses have not been made ratproof. Rats can get into them easily. Even when buildings have been made ratproof, rats sometimes get in because a door has been left open.

Many rats find homes out of doors under rubbish heaps and old piles of lumber. All rubbish heaps should be cleaned up. Lumber should be piled so that rats cannot hide under it.

*How can we keep rats from getting food?* Ratproof buildings will keep rats from getting food. If buildings are not ratproof, all food in the building should be kept away from rats. Bread may be kept in tin boxes. Meat should be put in the icebox. The garbage can should be made of metal and should be kept covered tightly

with a metal lid. Scraps of food should not be left in the yard or on the street. Rats will not stay where they cannot get food.

### Can You Complete These Sentences?

1. We can get rid of rats by keeping them from having a place to \_\_\_?\_\_\_ their \_\_\_?\_\_\_.

2. We should try to keep rats from getting \_\_\_?\_\_\_ to eat.

3. We should build our \_\_\_?\_\_\_ so that rats cannot get into them.

4. We should clean up \_\_\_?\_\_\_ \_\_\_?\_\_\_ so that rats cannot find homes out of doors.

5. The \_\_\_?\_\_\_ \_\_\_?\_\_\_ should be kept covered with a metal lid.

6. Lumber should be \_\_\_?\_\_\_ so that rats cannot hide under it.

7. Bread should be kept in \_\_\_?\_\_\_ \_\_\_?\_\_\_.

*How can rats be killed?* Do you know how to kill rats? One way is to trap them.

Rats are so sly that it is a good plan to leave the trap unset for a night or two where the rat can see it. When the trap is set and baited, it may be put under a chair that is covered with a



cloth, or it may be put far back in an overturned box or barrel.

Another way to kill rats is by poisoning them. This is a sure way, but a very dangerous one. Poison should not be used where children, dogs, or cats can get it. A poison that will kill a rat may be strong enough to kill a child.

Rats have large families, and have many families each year. For this reason they should be killed before they can raise their families. A father and mother rat are called a pair of rats. One pair of rats can have from six to ten families of rats a year. In each family there are usually ten or more little rats. Just think how many little rats one pair of rats may have in one year!

*What are the enemies of rats?* Certain birds and animals help us in getting rid of rats. Most cats are poor ratcatchers. If a cat is very hungry, it may kill a rat, but most cats are too well-fed and too lazy to try to kill an animal that fights as well as a rat does. They would rather catch mice and birds.

Dogs are better ratcatchers than cats. The small terriers are the best dogs for this purpose.

All the larger hawks and owls, and many of the smaller ones, kill rats. Even the little screech owl will kill a young rat. The large hawks that sometimes kill chickens kill more than enough rats to pay for the chickens they eat.

The best ratcatcher among the birds is the barn owl. He likes to hunt rats. Rats go in search of food after dark. This is just the time the barn owl is looking for his supper. One man who has studied barn owls says that each of these owls is worth at least twenty-five dollars a year to the farmer because of the rats it kills.

### Can You Find These Sentences?

1. Read all the sentences that tell how to set a trap for a sly rat.

2. Read a sentence that tells why rat poison is dangerous.

3. Read a sentence that tells why we should kill rats as soon as we find them.

4. Read a sentence that tells why the cat is not a good ratcatcher.

5. Read a sentence that tells the kind of dog that catches rats best.

6. Read a sentence that tells two kinds of birds that kill rats.

7. Read a sentence that tells about the value of large hawks as ratcatchers.

8. Read a sentence that tells the kind of bird that catches rats best.

### Can You Make an Outline to Summarize the Lesson?

This lesson on rats is divided into two main parts. Find the page where Part I begins. Part I tells about the harm that rats do. It gives three ways in which rats are harmful.

Find Part II. Part II tells four ways to get rid of rats. Now that you have studied the lesson, copy this outline and fill in the blank places. *Do not write in this book.*

#### I. How rats are harmful

A.

B.

C.

#### II. How to get rid of rats

A.

B.

C.

D.

## Choose the Right Word

tea	milk	raisins	fish
coal	bricks	flour	corn
wool	rubber	butter	paper
	leather	coffee	

Number your paper from 1 to 14. Choose the right word from the list at the top of the page for each sentence below. Write the word on your paper after the number for that sentence.

1. \_\_\_?\_\_\_ is dug from the ground.
2. \_\_\_?\_\_\_ is a grain.
3. \_\_\_?\_\_\_ is made from the juice of a tree.
4. \_\_\_?\_\_\_ grows on the back of an animal.
5. \_\_\_?\_\_\_ is the seed of a tree.
6. \_\_\_?\_\_\_ is the tanned skin of an animal.
7. \_\_\_?\_\_\_ is the dried leaves of a bush.
8. \_\_\_?\_\_\_ is made from the seed of wheat.
9. \_\_\_?\_\_\_ are made from clay.
10. \_\_\_?\_\_\_ is made from cream.
11. \_\_\_?\_\_\_ live in water.
12. \_\_\_?\_\_\_ is made from wood.
13. \_\_\_?\_\_\_ is made into cheese.
14. \_\_\_?\_\_\_ are dried grapes.

## Roman Numerals

About two thousand years ago the Romans lived in the country we now call Italy. Then they were the most powerful people of Europe, and ruled most of the world that was known at that time. Because Roman ways of doing things spread over much of Europe, Roman numerals came to be used in many places.


The Romans used letters instead of figures in writing their numbers. They made all their numbers by using seven different letters. These are the seven letters and the numbers for which they stand:

I = 1	L = 50
V = 5	C = 100
X = 10	D = 500
M = 1000	

We do not know just why the Romans used each of these letters. It is thought that people first started putting down one mark for each thing they counted. The use of the letter I for I, II, and III probably started in that way, because it was the letter in the Roman alphabet that looked like a straight mark.



All people of long ago counted on their fingers. They held up two fingers to stand for the number 2, or they held up a whole hand to stand for 5. It is believed that the Romans used V for 5 because it looked like a hand with the thumb out and the fingers close together.

The Romans probably used the letter X for 10 because it looked like two V's placed together like this :  $\text{X}$  . However, it might have come from crossing out ten marks like this : 

The letter C was used for 100 because it was the first letter of the Romans' word for hundred. M stood for 1000 because it was the first letter of the Romans' word for thousand. It is not known how L came to stand for 50 or how D came to stand for 500.

Roman numerals are still used for some things. They are often used on the faces of watches and clocks. Roman numerals are sometimes used on a building to tell the year when the building was built. Chapters in books, volumes in sets of books, and pages in the preface of books are often numbered with Roman numerals. The main topics in an outline are usually numbered with Roman



What do you think the merchant is saying?

numerals. You have used them for making outlines in lessons in this book.

It would be very hard to use Roman numerals in all the places where we use figures. Just think how hard your arithmetic lessons would be if you had to work problems like this:

Mary's mother gave her XV cents every Saturday. Mary saved her money for V weeks. How much money did she save?

This is the way you would have to multiply XV by V in order to find out how much money Mary saved.

XV	Write the X five times: XXXXX
$\times V$	Five X's are fifty and must be written L.
<u>LXXV</u>	Write the V five times: VVVVV
	Five V's are twenty-five and must be written XXV.
	Put L and XXV together. The answer is LXXV.
	Mary saved LXXV cents.

It is necessary for you to remember only four letters to read and write most of the Roman numerals you will need to use. These letters are

I, V, X, and L. Three simple rules will help you to read and to write Roman numerals correctly.

1. When numbers are alike, add them.

XXX = 30     III = 3

2. When a smaller number follows a larger one, add them.     XV = 15     XXVII = 27     LX = 60

3. When a smaller number comes before a larger one, subtract the smaller number from the larger one.     IV = 4     XL = 40

### Using Roman Numerals

1. Write the numbers for which these Roman numerals stand:     XXXII     XVIII     XL     LXX  
CX     DCC     MMD     XC

2. Write the Roman numerals for these numbers:     9     26     35     55     75     150     100     50

3. Write two Roman numerals to illustrate the first rule given above.

4. Write two Roman numerals to illustrate the second rule.

5. Write two Roman numerals to illustrate the third rule.



## Down the Congo

In this story, Jack, like all good travelers, carried a map that he looked at many times during his journey down the Congo River. In order to enjoy the trip with Jack, you must look at the map on page 245 every time he looked at his. After you find a place on the map, see if there is a picture of that place in the book. These pictures, like those in geographies, are called *figures*.

### I. JACK LEARNS TO READ A MAP

“From Elizabethville to Bukama (bōō kā’mä)! Down the Congo! Around the rapids! Down to the sea! Across the Atlantic! Then the United States!” sang Jack. He hopped on one foot and danced on the other as he sang. He watched the natives load all the things he and Mother and Daddy would need on the long trip from Africa to the United States. (Look at Figure 1.)

Into the narrow, dirty, creaking train went the tin boxes and metal suitcases. One was the medicine chest. Some were filled with canned food. Others held clothes, bedding, mosquito nets, and pans for cooking. Everything was packed in metal boxes to protect it from white





Figure 1. *Loading baggage at Elizabethville*

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ants. These ants are found everywhere in Africa, and they eat through anything made of wood or leather. Last of all, Jack saw the folding bathtub, camp beds, and chairs loaded onto the train. On a trip down the Congo, travelers must carry with them everything they will need on the journey. The cars of the African trains are like freight cars, without seats, and the trains have no dining cars or sleeping cars. At night the travelers leave the trains and sleep in stations, which have no furniture.

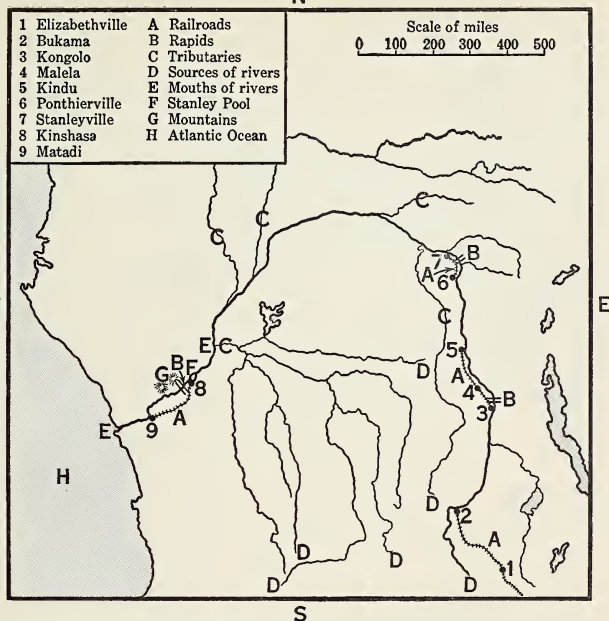
The little engine puffed, the whistle blew, and the train rattled slowly away from the station. For the first time, Jack felt a little sad to be leaving Elizabethville. It was the only home he could remember. He took one last look at its pretty buildings, wide streets, and palm trees, flowers, and green grass. He was now headed north toward the Congo River.

Jack's father was an American mining engineer who had helped to run one of the famous copper mines near Elizabethville, in the part of Africa called the Congo. Jack had come to Africa when he was a tiny boy. Now, after seven years in the middle of Africa, he was returning to the United States. He could hardly wait until the train reached Bukama and the Congo River.

During the hot train ride to Bukama, Jack and Daddy looked at a map that they had brought along. Jack knew very little about maps, but Daddy had promised to teach him to read one.

"This," said Daddy, pointing to a black dot on the map, "is the city of Elizabethville. Such a dot on a map always stands for a city or town." Pointing to another dot farther up on the map,

N



S

Figure 2. *This map shows Jack's trip down the Congo*

Daddy said : "This is Bukama. That is where this train is taking us. You can see that the dot for Elizabethville is connected with the one for Bukama by a line with marks across it." Daddy pointed to a line like this : **++++**. "Such a line on a map is the sign for a railroad" (Figure 2).

"What is this wavy line?" asked Jack.

"That is the Congo River," said Daddy.

"Rivers are shown on a map by wavy lines. If you were high above a river in an airplane, it would look like a wavy line on the earth below."

"Bukama is on the Congo!" said Jack. "I can see the dot standing for Bukama next to the wavy line showing the Congo River. It's fun to read a map!"

After more than a day on the train, Jack and his parents reached Bukama. It was a sun-baked village on the banks of the muddy Congo River. The mud that the river carried came from far upstream. Upstream is the direction from which the water comes as it flows down a river.

At Bukama, Jack watched the sweating natives load the baggage onto the river boat (Figure 3). This boat was to carry him and Mother and Daddy downstream as far as Kongolo (kǒng-gō'lō). Downstream is always the direction in which the water of a river is flowing.

Jack could hardly wait to get aboard the boat and see what it was like. The boat had two decks. Jack and his parents had a cabin on the upper deck. The cabin was just an empty room, but Sabani (sä bǎ'nē), their native boy, set their

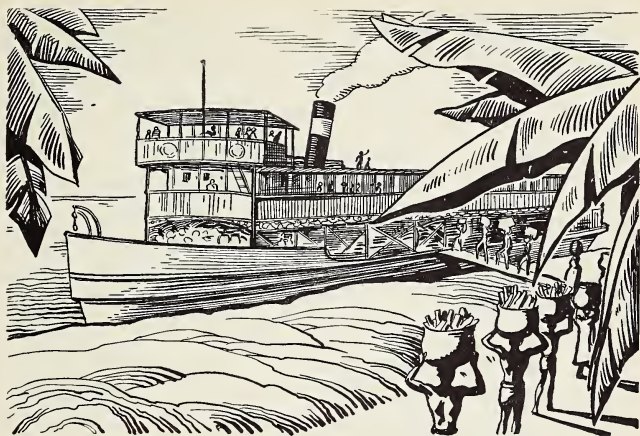


Figure 3. *Loading the boat at Bukama*

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beds up in it. Soon he had made the place as comfortable as possible.

The lower deck was crowded with something of everything, Jack thought. The boilers which furnished power to run the boat were down there. Wood was stacked near them, and barrels and boxes were piled high.

As the boat went down the river, Jack liked to lean over the railing of the top deck and watch two men below taking soundings at the bow, which is the front of a boat. When the markers, as these men were called, took soundings, they



measured the depth of the water with two sticks which had numbers marked on them. By knowing where the water was deepest, the captain could keep the boat from getting stuck in the mud. First one and then the other of the men dipped his stick into the water and called out the number, telling how deep the water was.

Their calling seemed to make a song, thought Jack. Once, when the boat was in very shallow water and soundings had to be made very often, a native passenger brought out a drum and played as the markers sang.

When Jack leaned over the upper deck at the stern, or back of the boat, he could hear the *swish-swish-swish* of the big wheel which pushed the boat down the river. He could look behind the boat and see the muddy water which had been churned by the big wheel as it turned over and over.

All the American and European passengers ate with the captain, who furnished the "chop," as the food was called. Jack grew very tired of the chop, which usually was canned vegetables, fruit, and goat meat or chicken stewed in palm



Figure 4. *A few huts stood farther back in the clearings*

oil. There was plenty of fruit. Pineapples, grapefruit, oranges, and bananas were easy to get along the river. Sabani bought a bunch of one hundred bananas for a nickel.

All day long, day after day, under the burning sun, the boat made its way down the stream to the north. Traveling downstream on this part of the Congo, the east bank of the river was to the right of Jack, and the west bank was to his left. Behind him was south.

The boat seemed to go so, so slowly! "Why doesn't the captain hurry?" said Jack to him-

self. But the captain never hurried. He gladly stopped at any time to let a passenger do a little shopping at a village. And he himself sometimes stopped to have a meal with a lonesome friend along the way.

At many places along the Congo, Jack saw wood stations where boats stopped to take on wood for fuel. These were little clearings along the banks of the river. Wood, cut in four-foot lengths, was stacked near the water. A few huts with roofs made of grass and palm leaves stood farther back in the clearings (Figure 4). Jack liked to have the boat stop at a station for wood. A few natives beat drums, while others carried wood onto the lower deck. The beating of the drums made the natives work faster. Even Jack wanted to hop or dance.

Natives in dugouts often paddled up beside the boat while it was tied up at a station for wood (Figure 5). Dugouts are long, narrow canoes made by hollowing out the trunks of giant trees that grow in the forests on the banks of the wide river. Once Jack saw a dugout so large that fifty men could ride in it. The men in the canoes



Figure 5. *Natives came in dugouts to trade*

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brought fruit, fish, palm oil, and sometimes even fresh meat or ivory to sell.

For a week the boat slowly made its way down the river by day. At night it was tied up to the shore. Heavy fog settled down upon the river at night; so it was not safe to travel in the dark. The river was very shallow in many places, and there was always danger of the boat's getting stuck in the mud and sand.

Early each morning the big wheel of the boat began its *swish-swish-swishing*, markers sang out their numbers, and the boat made its way

slowly downstream. Jack sometimes watched lazy crocodiles sun themselves on the muddy bank and slide into the water as the boat passed. Once he saw a hippopotamus rush out of the water and disappear into the tall grass near the shore (Figure 6).

At last the boat reached Kongolo. All boats must stop there. Travelers must get off and take a train to the next village of Kindu (kĩn'dōo), which is two hundred miles away. This is because boats cannot travel through the rapids in

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Figure 6. *Once Jack saw a hippopotamus*







Figure 7. *Rapids in the Congo near Kongolo*

the river beyond Kongolo. They would be dashed to pieces on the rocks by the rushing water (Figure 7).

At Kongolo, Daddy and Jack looked at their map. Jack saw the dot that stood for Kongolo. He saw the sign for the railroad that led to Kindu. On the sign for the Congo River, just beyond Kongolo, he saw marks like this:  $\text{H}$ . "What does this mean?" asked Jack, pointing to the marks.

"That is the sign for rapids," said Daddy. While they were at Kongolo, Daddy took Jack down the river to get a better look at the rapids.

## Which Ending Makes Each Sentence True?

Below are sentences with three different endings. Choose the ending that makes the sentence most nearly true. On your paper write the Roman numerals from I to X. After each numeral write the number of the ending you choose for that sentence. You must think which endings to choose, as they are not given in the book.

### I

The river boats on the Congo burn wood because

1. wood is cleaner than coal.
2. wood makes a hotter fire than coal.
3. there is plenty of wood but no coal near by.

### II

The huts of the natives have roofs made of grass and palm leaves because

1. grass and palm leaves are easy to get along the Congo.
2. rain makes a loud noise on wooden or tin roofs.
3. such roofs look pretty in the jungle.

### III

Natives along the Congo use dugout canoes because

1. they carry more people than other kinds of canoes and rowboats.
2. they are the easiest kind of canoe to make from the large trees in the forest.
3. they float on the water better than other kinds of wooden boats.

### IV

The steeply sloped roofs of the native huts along the Congo River suggest that in this region there is

1. little rain.
2. much rain.
3. no rain.

### V

A person living in one of the cities on the Congo River would have to mow the grass in his front yard

1. once in a while.
2. often.
3. not at all.

## VI

The chief food of the natives along the Congo River is

1. fruit and vegetables.
2. meat and bread.
3. candy and sweets.

## VII

The natives cook most of their food in

1. lard.
2. palm oil.
3. hippopotamus fat.

## VIII

Most of the travel in the part of Africa that is a jungle is made by

1. boat.
2. train.
3. airplane.

## IX

The depth of the water in the Congo River is

1. the same in all places.
2. enough everywhere for river boats to travel on it.
3. not the same in all places.

A clearing along the bank of the river is a place where

1. all the trees are cut down.
2. the water is clear and clean.
3. the sky is very blue and the sun is shining.

## II. ADVENTURES FARTHER DOWNSTREAM

Early the next morning, Jack and his parents went aboard the tiny train that would carry them on their journey from Kongolo. In the Congo region, trains, like boats, stop for the night. Trains there are not built for night travel. Besides, Daddy said that elephants and other wild animals often tore up the tracks and it was not safe to run the trains in the dark.

Jack watched for elephants all day, but he saw none. He did see one small herd of antelope. When night came, the little train jolted to a stop at Malela (mä lä'lä). Sabani put up beds for Mother and Daddy and Jack in a hut that had been built for passengers by the railroad company (Figure 8). The next morning they were off again.



By reading his map Jack found that Kindu was to be the next stop. There Mother and Daddy and he would take the boat to Ponthier-ville (pôn tyā'vīl).

Night came without a sign of elephants. "Just my luck!" said Jack. But he was glad to have reached Kindu, for it was much nicer to ride on the river than it was to ride in the hot, crowded train.

At Kindu, Sabani and some other natives loaded the baggage onto another boat (Figure 9). Soon Jack was again on the Congo. The Belgian minister was also on this boat. He was the chief

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Figure 8. *Where Jack slept at Malela*





Figure 9. *Natives at Kindu*

---

officer in the Congo and was honored like a king when he traveled down the river.

Jack saw Belgian flags flying over Kindu. Thousands of natives yelled when the boat started down the river. Drums were beating in the village. There was so much excitement that not even Mother seemed to notice the heat and the flies. At every village the native soldiers came in their paint and feathers to welcome the Belgian minister. All the native chiefs wore tin medals given them by the Belgian government, and they made long speeches and shook hands with the minister.

After four exciting days, the boat reached Ponthierville. Low red-brick houses covered with bright-red flowers, roads lined with flaming fire trees, and grassy slopes above the swift-flowing river made Ponthierville one of the most beautiful towns that Jack had ever seen in his life.

Below Ponthierville, the river is again filled with rapids. Jack found them marked on his map. Boats cannot travel safely on this part of the river. So Mother, Daddy, Jack, and even the Belgian minister boarded the narrow, crowded train for Stanleyville. One traveler who had not brought a chair had to sit on the floor during the six-hour trip. Jack was very glad that Sabani had carried chairs for Mother and Daddy and him.

Stanleyville was the first real city Jack had seen since he left Elizabethville. Stanleyville is built on the banks of the Congo where that river starts to flow toward the west. Daddy took Jack to see Stanley Falls, which is just a mile outside the city. The water falls six feet over rocks in the river.

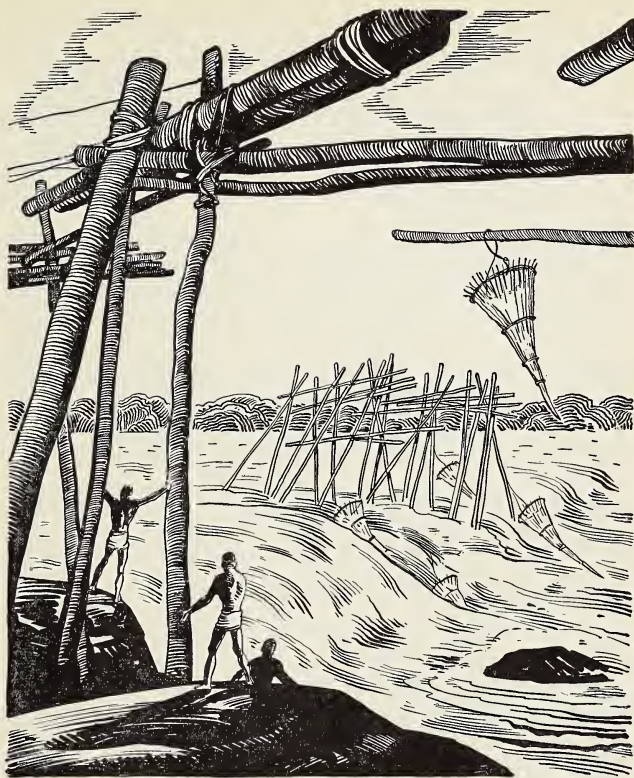


Figure 10. *Stanley Falls and the fish traps at Stanleyville*

Jack was most interested in the poles and fish traps which he saw standing in the tumbling waters. The natives catch fish in these traps (Figure 10).

"Because Stanleyville is almost on the equator and it is noon now, your shadow just covers your feet," said Daddy. "When we get to America, even at noon your shadow will stretch out behind you when you face the sun."

"And in winter there will be snow, too!" said Jack. "Is snow much like refrigerator ice?"

"Not exactly," said Daddy. He had tried many times to tell Jack what snow was like and how much fun it was to make snow men and to slide down hills on a sled. But Jack could not imagine what winter and cold weather were like. He could remember having lived only in that part of Africa where it is summer all the year.

After a few days in Stanleyville, Mother and Daddy and Jack again went aboard a river boat. It was larger than the ones they had been traveling on. For almost a thousand miles it would carry them downstream toward the ocean. In all that distance there was not a single sign on Jack's map for rapids in the river.

The great forest comes down to the very banks of the wide river below Stanleyville, and the shore is a wall of jungle (Figure 11). Stiff





Figure 11. *The wall of jungle along the river*

palm trees with green vines twisted about them hang over the water. Thousands of islands dot the river. Some of them are many miles long and several miles across. Jack could not always see the banks of the river, for it is nine or more miles wide in many places.

Several large rivers flow into the Congo on its way to the sea. All rivers which flow into another river are called tributaries. Jack and Daddy traced the tributaries of the Congo on Jack's map.

"To trace any river on a map always start at the beginning of the river," said Daddy. "The beginning of a river is called its source."

"If I begin to trace the river from its source," said Jack, "I shall be making my finger go downstream to the end of it."

"The lower end of a river is called its mouth," explained Daddy. "The mouth of a tributary is the place where it flows into a larger river. The mouth of the Congo is the place where it flows into the Atlantic Ocean."

It was easy for Jack to tell when the boat passed the mouth of a tributary of the Congo,

for each one was bringing water of a different color into the big river. The water of one tributary looked almost black. One was grayish white, one was greenish, and another was brick-colored. The water of each river was the color of the dirt and rocks through which it had flowed from its source to its mouth. For many, many miles Jack thought the great Congo looked like a striped ribbon stretched behind the boat.

Sometimes the boat had to stop because it could not get enough wood to keep the boilers hot. There were trees everywhere, but the natives did not like to work at cutting them. Along the way, the boat often stopped to pick up barrels of palm oil. Jack knew that palm oil was sent to Europe and America to be made into soap, salad oil, and margarine, which some people use instead of butter.

Finally the boat entered the narrow part of the river. Here the river was very deep and was sometimes not more than a mile wide. The water flowed swiftly, and there were no islands or forests along this part of the river. To the north, far away, Jack saw mountains.




Figure 12. *Stanley Pool*

Jack had been journeying down the Congo for more than a month when the boat entered Stanley Pool (Figure 12). The pool was very much like a lake dotted with green, tree-covered islands. At the end of the pool, the boat tied up at the town of Kinshasa (kĭn shă'să). The long journey by river boats was over.

Kinshasa stands above the river on the south bank. Facing north from Kinshasa, Jack looked down upon the Congo as it flowed downstream toward the sea. It split into many little streams as it flowed around small islands in the river. It seemed still and safe; yet Jack knew it was full of crocodiles, for he had seen many of them during the trip.

Looking farther downstream toward the west, Jack saw the river run into rapids. He knew the water was not still, but that it was flowing very fast, because a fine spray rose high into the air. Even from the hill where he stood, Jack could hear the roar of the water as it tumbled over the rocks toward the sea.

Across the river, Jack could see mountains far off. In the sunset the river looked silvery white, the mountains seemed very blue, and the trees were bright, bright green. The sight was so beautiful that Jack looked at it for a long, long time.

That evening at their hotel, Jack and Daddy found the rapids near Kinshasa marked on the map. They also found marks like this , which stand for mountains on a map.

The next morning, Jack saw Sabani once more load the baggage onto a tiny train. This was to be Jack's last train ride in Africa.

In one more day, Mother and Daddy and Jack reached Matadi (mă tă'dē), which is almost one hundred miles from the mouth of the river, the place where the Congo flows into the ocean.



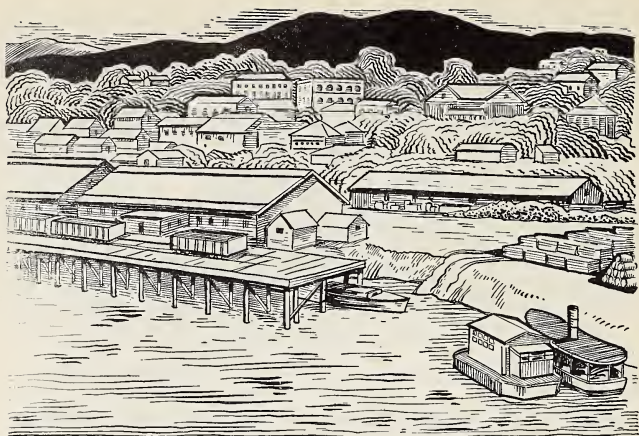
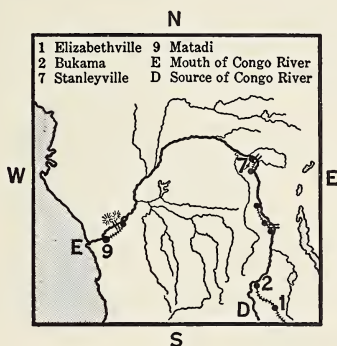


Figure 13. *At Matadi*

But the river is so deep at Matadi that ocean steamers can come as far upstream as that (Figure 13). After Sabani had packed into the cabin of the steamer all the baggage needed for the journey across the ocean, he sadly left his American friends. As the big ship steamed downstream, Jack saw something white fluttering from the boat docks. It was Sabani, waving farewell with a towel. Jack waved his handkerchief at Sabani. Then, when no one was watching, Jack wiped his eyes with it.

## Can You Read a Map?

The map on this page is a small outline map of the same region that is shown in the map on



page 245. You should be able to answer the following questions about it:

1. Near what letter on the map is the source of the Congo River?

2. In what direction does the Congo flow in going from Bukama to Stanleyville?

3. In what direction does it flow from Matadi to the ocean?

4. If you went from Stanleyville to Bukama, would you be going upstream or downstream?

5. What letter shows the mouth of the Congo River?

## A Test of Memory

In the lessons you have studied in this book you have learned a number of new words. Most of these words have been explained to you. This lesson will show you how well you have understood and remembered the meanings of some of these words. The words and their meanings are given below.

Number your paper from 1 to 16. After each number write the word that is missing. *Do not write in this book.*

temperature	graph	jungle
poison	stockade	pioneer
caravan	mahout	howdah
downstream	colonial	pores
bow	index	
lye	thermometer	

1. ---?--- is a liquid made by pouring water through wood ashes.

2. A ---?--- is a company of people traveling together on a long journey across the desert.

3. A ---?--- is a strong, high fence of logs.

4. \_\_\_?\_\_\_ is the direction in which a river flows.

5. A \_\_\_?\_\_\_ is a man who trains and cares for elephants.

6. The \_\_\_?\_\_\_ means the front end of a boat.

7. The \_\_\_?\_\_\_ is a seat on the back of an elephant.

8. A \_\_\_?\_\_\_ is a person who is an early settler in one part of a country.

9. A \_\_\_?\_\_\_ is an instrument for measuring temperature.

10. An \_\_\_?\_\_\_ is an alphabetical list of what is in a book, telling on what pages to find each topic.

11. A \_\_\_?\_\_\_ is wild land thickly covered with bushes, vines, and trees.

12. \_\_\_?\_\_\_ is something that is very dangerous to life and health.

13. A \_\_\_?\_\_\_ is a drawing that may be used to show what scores you make on your tests.

14. \_\_\_?\_\_\_ children lived in the colonies.

15. \_\_\_?\_\_\_ is the amount of hotness or coldness of something.

16. \_\_\_?\_\_\_ are tiny openings in the skin.

# Do the Birds Help Us?

## I. BIRDS HELP US IN MANY WAYS

Once a man told a story about a place where the people had killed all the birds. There was not a bird left in the trees to make the people happy by its singing. There was not a bird to eat the bugs and the worms.

When the hot weather came, there was no shade at all, because the insects had eaten the leaves from the trees. Of course there were no birds to kill the insects.

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There were thousands of caterpillars in the orchards. Every plant in the gardens had been eaten by insects. The farmers did not have much food, because the insects ate most of the crops. Worms dropped down from the trees upon the people as they passed by. No one wanted to live in this place.

Of course this is only a story, but could it be a true story? Do the birds make our towns better places in which to live? Do they help the farmers? Do they help to take care of our trees, our gardens, and our crops?

If you watch the birds in your yard or garden, you will see that they are busy almost all the time. The robin that hops across the lawn stops every few minutes to listen. Then he pecks at a worm in the grass and pulls it out. You may see a little woodpecker on an apple tree. He goes round and round each limb and peeks into each crack in the bark. A wren darts from its little house to get bugs for its babies.

Even in winter, when few insects can be seen, some birds are busy helping us. The chickadee is one of the most helpful. In the stormiest

weather you may hear his cheerful call, "Chick-a-dee, chick-a-dee." If you watch, you will see him peeking into cracks in the bark of trees. He is looking for the eggs that the insects laid during the fall. Because the chickadee has such a good appetite, he destroys many eggs before they have time to hatch. Other birds that help us during the winter are the brown creepers and the nut-hatches.

It is hard to see all the things that birds eat. How, then, can we decide which birds are helpful and which are harmful? There is only one way in which to be sure. That is to find out what each kind of bird eats at different times of the year.

One way to do that is to learn what is in the stomachs of a great many birds of each kind. This should be done by people who know most about birds. There are men in different parts of the country who have spent many years in finding out what birds eat. Some of them are paid by the government to find out which birds help us by eating weed seeds, rodents, and harmful insects.



## II. HARMFUL BIRDS

Probably all birds do some good, but a few of them do a great deal of harm. Some destroy fruit and grain; some drive out more useful birds. Some, because of their dirty habits, are a nuisance.

Most woodpeckers are helpful. The only one that does any harm is the sapsucker. He injures trees by boring holes into the bark to get the sap. One man has tried to find out how much damage sapsuckers do to trees. He believes that they spoil a million dollars' worth of lumber every year.

The starling destroys crops and drives out other birds. The English sparrow also drives out other birds, eats a good deal of grain, and is a

nuisance in many ways. Whenever the crow is found in great numbers, it does great damage to crops. Some kinds of hawks kill chickens. Most men who have studied birds think that these harmful kinds should be destroyed.

### Proving Your Answer

Did you find the answers to the questions that were asked on page 273? See if you can prove your answers by telling the following things:

1. Name some things that might be destroyed if we had no birds.

2. Name three birds that help even in the wintertime.

3. Name three other birds that help.

4. Tell what foods birds eat.

5. Tell about the only way to be sure which birds are most helpful.

6. Give three reasons why some birds do a great deal of harm.

7. Name five kinds of birds that are harmful.

8. Name three reasons that tell why people do not like English sparrows.

### III. USEFUL BIRDS

Men who have been hired to find out what birds eat tell us that birds help us in three ways :

1. Many birds eat insects that are harmful.
2. Many birds eat the seeds of weeds that crowd out useful plants.
3. A few birds eat rats, mice, and other small animals of the rodent family that cause us a great deal of trouble.

1. *Birds that eat insects.* If we had no birds, the insects would do much more harm than they do now. Some insects injure our crops, some destroy our flowers, some spoil our fruit, and some kill or injure our trees. Other insects annoy both animals and men with their stings and bites, and some carry diseases. All these kinds of insects are eaten by birds.

Woodpeckers help to protect our trees from many kinds of harmful insects. They eat beetles, ants, and caterpillars. They also eat the eggs of insects before they have time to hatch out.

The little woodpecker that you may have seen on an apple tree was probably the downy wood-



pecker. If you watch him at work, you will see that he goes over a tree looking into every hiding place. His sharp eyes find eggs and insects so small that we can hardly see them. Men who have studied the foods that birds eat have found forty different kinds of harmful insects in the stomachs of downy woodpeckers. Three fourths of their food is made of such insects. They do not eat the farmer's fruit.

Flycatchers, nighthawks, swallows, and whip-poorwills help to free the air of insects. All these birds kill great numbers of flies, mosquitoes, gnats, moths, beetles, and grasshoppers. The swallows and flycatchers work in the daytime and evening, but the nighthawks and the whip-poorwills work at night, when most other birds are asleep. We should protect all these birds in every way we can.

You can be sure that the cuckoo that you may have seen eating a caterpillar would not stop with one. Before the day is over, he may have eaten a hundred caterpillars and many cutworms. Two hundred and fifty caterpillars have been found in the stomach of one cuckoo.

In the South, where cotton grows, the birds save the farmers thousands of dollars every year by eating an insect called the boll weevil. Among the enemies of this insect are the beautiful orioles and the swallow.

Sometime when you are in the country you may hear a birdcall that sounds like "Bob White, O, Bob White." That is the call of the quail, one of the farmer's best friends. All day long this helpful bird is busy cleaning grasshoppers, potato bugs, cutworms, and other harmful insects from the crops.

Now and then something happens that shows how birds help us. The first crop that the early settlers of Utah planted had grown well and was almost ripe when millions of black crickets settled on the fields and ate the whole crop down to the ground. The next year the settlers planted another crop. Again the crickets came, but this time, before the crickets could do much harm, great flocks of gulls appeared. They gobbled up the crickets, and in a little while not a cricket was left. The crop was saved. Ever since then the gulls have been protected in Utah.

## A Matching Test

This lesson tells you about nine birds that eat insects. Make a list of them.

Below are eleven things that these nine birds do. Number your paper from 1 to 11. After each number write the names of the birds that do these things. Sometimes you will write the name of only one bird. Sometimes you will write more than one name.

1. Helps to free the air of insects.
2. Eats caterpillars.
3. Eats eggs and insects hidden in the bark of trees.
4. Is one of the farmer's best friends.
5. Makes insects three fourths of his food.
6. Eats crickets.
7. Helps to save the cotton plants by eating boll weevils.
8. Catches insects in the air at night.
9. Catches insects in the air in the daytime.
10. Eats grasshoppers, cutworms, and potato bugs.
11. Protects our trees.

2. *Birds that eat seeds.* You have seen how the birds help us by eating harmful insects. The second way in which they help us is by eating the seeds of weeds. Most of the birds that eat insects eat some seeds too. The quail is one of them. A man who has studied the habits and food of quails says that quails eat many tons of weed seeds each year. Other birds, such as the cardinal and the tree sparrow, get most of their food from weed seeds. Birds that stay with us in the winter keep busy looking for seeds, since worms and insects are hard to find. Even the little tree sparrows, which are among the smallest of our birds, eat tons of weed seeds each winter. Think of the weeds we should have if all those seeds had been left to scatter and grow.

3. *Birds that destroy rodents.* The third way in which birds help us is by killing small gnawing animals, called rodents, such as rats, mice, and gophers. These small animals do a great deal of damage to crops and food, and sometimes spread diseases.

Some of the owls eat almost nothing but rats and mice. Others eat ground squirrels, gophers,





As soon as it gets dark, the barn owl goes hunting



and rabbits. The barn owl is especially valuable to the farmer. As soon as it gets dark, this owl goes hunting. He flies silently, close to the ground, looking for food. He likes rats and mice very, very much. In one year two barn owls ate four hundred mice and twenty rats. What damage these mice and rats would have done!

Most of the hawks eat harmful rodents. Their chief food is meadow mice, but they also eat rats, rabbits, and ground squirrels. Many of the smaller hawks eat insects also.

A few of the larger hawks sometimes kill chickens. Only three kinds of hawks do that, and even they do not do it very often. They probably pay the farmer for the chickens they eat by killing harmful animals.

### Filling In an Outline

Part III tells you about *Birds that eat insects*, *Birds that eat seeds*, and *Birds that kill rodents*.

Copy this outline and fill it in with the names of birds. Under heading A, *Birds that eat insects*, there are nine numbers. After each number write the name of a bird that eats insects.

Under heading *B* write the names of the three birds that eat seeds. Under heading *C* give the names of two birds that kill rodents. *Do not write in this book.*

*A. Birds that eat insects*

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7
- 8.
- 9.

*B. Birds that eat seeds*

- 1.
- 2.
- 3.

*C. Birds that kill rodents*

- 1.
- 2.

#### IV. HOW TO ATTRACT AND PROTECT USEFUL BIRDS

Because of all the ways in which birds help us, there is good reason for protecting them. There are other reasons too. We like them for their beautiful songs and color. We find them interesting to watch.

1. One way in which to attract useful birds is by putting up nesting boxes for them in the spring.

Wrens, screech owls, barn owls, bluebirds, martens, swallows, and woodpeckers are some of the birds that will use houses that we build for them.

2. Even the birds that build their own nests must have places in which to build them. So one way to attract birds is to have trees and bushes where nests can be built. The bushes also help to protect the birds in the winter.

3. Another way to attract birds is to build bird baths for them and to see that the baths are kept full of clean water. All birds must have water to drink. Most birds like to live where they have a place to bathe.



4. Still another way to help the birds is to protect them from their enemies. One of their worst enemies is the house cat. Cats frighten the birds away and kill great numbers of young birds before they are big enough to leave the nest. Squirrels, especially red squirrels, eat both the eggs and the young birds.

5. But of all the ways of helping birds, the best way is to feed them when they are hungry. In the summer they can usually find all the food that they need, but in the winter food is hard to find. How should you feel if you were to get up on some cold winter morning and find nothing to eat in the house and all the stores closed? That is what the birds often find on snowy winter days. The trees, the bushes, the tall weeds, and the open fields are the bird stores. When deep snow or a coating of ice covers all the places where the birds usually get their food, they find all their stores closed. Then, unless someone feeds them, they starve to death.

Wise farmers leave grain and other food for winter birds. They also leave some bushes in the fence corners to shelter them. People build



shelters and feeding boxes in their yards to help the birds during the winter. Even boys and girls can do a great deal. They can build shelters and feed the birds in their own yards. They can also feed the birds in the woods and fields.

A few years ago a group of schoolboys in one town formed a club whose purpose was to provide shelter for birds in winter. After every snowstorm or ice storm, they went out with shovels and food. They made seventy-five feeding stations in the woods and fields around the town and kept them supplied with food all winter. In this way they saved the lives of thousands of birds.

### Making Rules for Protecting Birds

This lesson on how to protect and attract useful birds has five parts. Each part is numbered and tells one way in which to help birds. Read Part 1. What does that paragraph tell you to do to help the birds? You might write

1. Put up nesting boxes.

Then read Part 2 and decide what it tells you to do. Do this for each of the five parts.

## A Memory Test

Now that you have read all of this lesson on how the birds help us, you should be able to tell whether these sentences are right or wrong. Answer each question with Yes or No.

1. Barn owls eat rats and mice.
2. Hawks probably do more harm than good.
3. Most birds are helpful.
4. The sapsucker spoils many trees.
5. Most woodpeckers protect our trees.
6. It is helpful to have birds eat weed seeds.
7. Owls are harmful.
8. Quails protect the farmer's crop.
9. Some birds drive away helpful birds.
10. All hawks should be killed.
11. We should protect the starling.
12. Children cannot do much to protect birds.
13. We should put out food for birds after a snowstorm.
14. Birds can find their food in the summer.
15. Our winter birds eat many weed seeds.
16. Cats are one of the worst enemies of birds.
17. The chickadee eats insects' eggs.

## Choosing the Right Answer

This is a test to see how well you remember some of the lessons you have already studied. There are twenty questions. You will find twenty answers following the questions.

Number your paper from 1 to 20. Read the first question. Then find the correct answer. After number 1 on your paper, write the letter that stands before the right answer to that question. Answer the other questions in the same way.

### Questions

1. How can you help birds in winter?
2. How did the pioneers get their soap?
3. Why is it hard to travel in the jungles?
4. Why should we kill rats?
5. Why is the bat useful?
6. How did the orphan boys of the desert get sheep of their own?
7. How were colonial schools heated?
8. Who owns public buildings?
9. How much does the sun shine in northern Greenland in the middle of winter?

10. Why should you know what the poison-ivy leaf looks like ?

11. How is 27 written in Roman numerals ?

12. Why do many hunters in Africa kill wild elephants ?

13. Why do the people of the desert live in tents ?

14. Why should birds be protected ?

15. Where did Engato's master find him ?

16. Why did Daniel Boone wish to settle in Kentucky ?

17. How are the names arranged in a telephone book ?

18. How many parts does the poison-ivy leaf have ?

19. What is the quickest way to find out whether or not a book has information on some topic ?

20. At what temperature does water freeze ?

### Answers

a. By means of fireplaces.

b. Because it eats mosquitoes.

c. Because they are easy to move.

d. At 32 degrees.

*e.* Because it grows all over the United States and causes much suffering if you touch it.

*f.* Because they want their valuable ivory tusks.

*g.* Because they eat many harmful insects and rodents, as well as the seeds of weeds.

*h.* They made it.

*i.* Because they destroy property and carry disease.

*j.* In alphabetical order.

*k.* Provide food and shelter.

*l.* Not at all.

*m.* Three.

*n.* They belong to all of us.

*o.* Because the land was rich and the hunting was good.

*p.* Because the trees and vines of the forest are crowded so close together.

*q.* In Africa.

*r.* Every six months the master gave them a certain number of lambs as pay.

*s.* Look in the index.

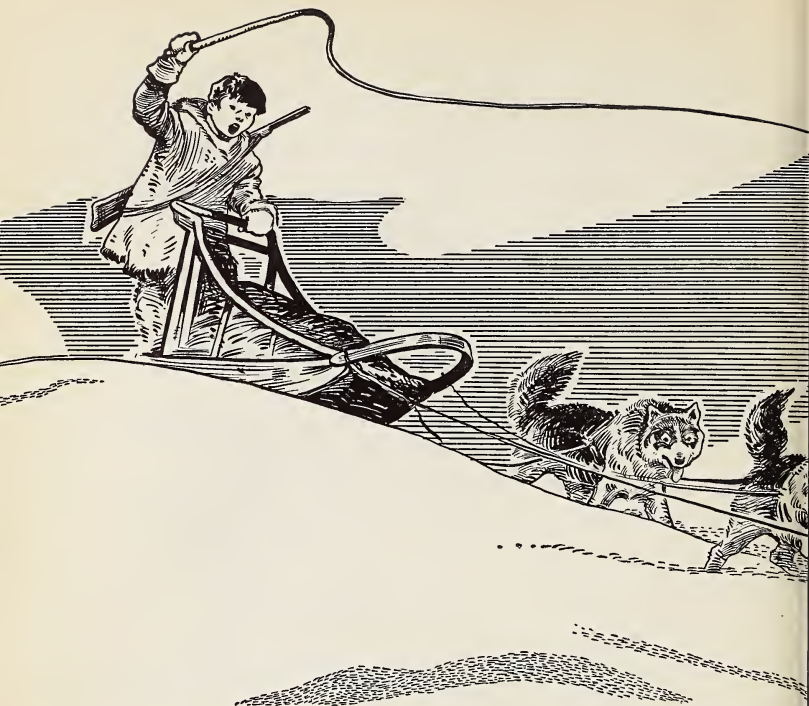
*t.* XXVII.



## More or Less

In the sentences below, either the word *more* or the word *less* must be used to make the sentence true. Number your paper from 1 to 14. Read each sentence, choose the right word, and write it after the number for that sentence. *Do not write in this book.*

1. Twenty-five days is \_\_\_?\_\_\_ than a month.
2. Six hours is \_\_\_?\_\_\_ than a day.
3. Seventy minutes is \_\_\_?\_\_\_ than an hour.
4. A pound is \_\_\_?\_\_\_ than ten ounces.
5. A gallon is \_\_\_?\_\_\_ than a quart.
6. Eight cents is \_\_\_?\_\_\_ than a dime.
7. Candles give \_\_\_?\_\_\_ light than electric lights.
8. Ten months is \_\_\_?\_\_\_ than a year.
9. Forty days is \_\_\_?\_\_\_ than a month.
10. Thirty hours is \_\_\_?\_\_\_ than a day.
11. Fifty seconds is \_\_\_?\_\_\_ than a minute.
12. There are \_\_\_?\_\_\_ hours of daylight in summer than in winter.
13. A cupful is \_\_\_?\_\_\_ than a pint.
14. Twenty weeks is \_\_\_?\_\_\_ than a year.



## Gunning for Seal

Kah-da (kä'dä) was a North Greenland boy, an Eskimo. This story tells how he went hunting for seal.

### I. KAH-DA KILLS HIS FIRST SEAL

Near the village was not a good place for seals because there were no wide ice fields. The hunters had to go fifteen miles north. It was a



hard journey up and over the hill. This hill was a thousand feet high and so steep that a dog team could hardly climb it. It was the warm season of the year and there was no snow on the south slope.

But Kah-da at last reached the top, where the snow-filled river valley led north. He was out of breath and covered with sweat. The dogs dropped. They were tired out after pulling the sledge so far over bare, rocky ground. But from here on it would be better. Snow could be found in the valleys at this time of year. Strong winds during the winter had piled it there, sometimes thirty or forty feet deep.

The dogs were now on their feet, wagging their tails and eager to go. They knew that up the valley and beyond the hills was fresh seal meat. That meant a good big dinner every day!

Within an hour they were dashing down the north slope. Within three hours Kah-da and his father had camped where their people had also lived many years before. Old, old igloos, now fallen down and covered with moss, had not been used for hundreds of years.

After a few hours' rest for themselves and the dogs, they were ready to hunt seals. It was hard to wake the dogs from their sound sleep in the sun. They like to sleep on the warm ground when the sun is high, in May and June. They

are also a bit lazy at this time of year, because they eat so much seal fat.

With heads and tails down, the dogs picked their way through the broken ice. Suddenly every head came up with a snap and every tail was tightly curled! Each nose was pointed toward the northwest, sniffing the cold, clear air. There was the smell of seal. Talking to his dogs in Eskimo, Kah-da let them go their way. He trusted to their noses to find what he wanted. He was looking for a black dot in the distance, a seal sunning himself on the ice.

As Kah-da drove out on the flat plain of ice, he counted ten seals. The wind was right, but the morning sun was wrong. It was at his back, which would put the front of his white screen in deep shadow. This would frighten the seals, who watch for anything strange on the white field of ice.

He worked his dogs around until the sun was at his side. He then unrolled the white screen and carefully fixed it upright. He placed the end of his rifle through a small slit in the center of the screen.





Kah-da touched the backs of his dogs lightly with his whip. He whispered, "Stay where you are and be quiet!" The dogs dropped their heads flat on the ice between their paws, blinking their eyes at each snap of the whip. They knew exactly why they were there and what their master was going to do. They also knew that out there

somewhere was something alive and covered with hair and good to eat. That is why they were so excited. As their master walked away one dog jumped to his feet, then two, then three, and finally all. They stood as if made of stone. With heads and ears up, they watched every move. There was a low whine, but not one dared to move. They must wait for the signal.

Kah-da went down on his hands and knees. He crawled slowly along, pushing the screen ahead of him. He tried to miss rough spots in the ice and pools of water formed by melting snow.

In the warm sun some seals will sleep for several minutes. Others seem to doze and lift their heads about every thirty seconds. Kah-da chose the seal he wanted. Twice Kah-da's seal looked at the screen and crawled nearer to his hole in the ice. Then the boy lay very still until the seal had again dropped his head and gone to sleep. Finally Kah-da got near enough. He dropped flat on his stomach and took a long, careful aim through the hole in the screen. With the bang of the rifle every dog leaped ahead.



Kah-da crawled slowly along.

## How Well Do You Understand Seal-Hunting?

You may find out how well you understand seal-hunting by answering the following questions:

1. What kind of place is good for seal-hunting?
2. How far from the village did Kah-da and his father need to go to find seal?
3. What things made the trip uphill hard?
4. How deep might the snow have been piled in the valley?
5. For what two reasons was it hard to wake the dogs from their nap?
6. How did Kah-da find out where to look for seals?
7. What do seals do at this time of year that makes it easy to catch them?
8. Why did Kah-da not want the screen to make a shadow?
9. Why did he use a screen?
10. What did Kah-da do with the dogs?
11. What was the signal for the dogs to come?
12. What did the other seals do when one was shot?





## II. SEALS HAVE KEEN EARS

In about an hour Kah-da was following a crack in the ice leading to the north. Seals are often found out on the edge of cracks. He found three very close together and all sound asleep. Generally it is hard to creep up on three, because one of them is sure to have his head up. But not so this time. There was a small ridge in the ice, and he could creep up without being seen. Kah-da had often heard his father and others tell of the day they shot two seals at one





hole. It was a big thing to do, and one which he hoped he could do sometime.

He tingled with excitement as he loaded his gun. Here was his chance. Could he do it? He would take no chances of the dogs' spoiling his luck. Several times before they had leaped toward him when he was just about to shoot. He tied them to a hole in the ice and told them sternly that he would punish them if they did not keep quiet.

He did not need the white screen this time. There were ridges all the way. Creeping from ridge to ridge, he at last found himself behind the biggest and the last one. Were the seals still

there? He hardly dared to look. He was tired of crawling. His mittens were full of snow. His knees were bare from the bottom of his bearskin pants to the top of his sealskin boots, and they were wet and red with cold. He could feel ice water running down one leg and knew that the snow was melting around the top of his hareskin stocking. But it was worth it all if he could tell his father that he had killed two seals at the same hole in the ice.

He blew down the barrel of his rifle with all his might. He wanted to make sure there was no snow in it after it had been pushed ahead of him so far. He loaded the rifle and stuck it around a block of ice. He peeped with one eye. Not a thing was there! He could see the hole and the patted-down and stained snow, but the seals had gone. He drew a long breath. Kah-da was disappointed. He had tried hard and he had failed. It would be a long time before he would have another good chance to show what a fine hunter he was. That is what every Eskimo boy wants to be.

As he went back toward his dogs and sledge,

Kah-da thought over every move he had made. He wondered how in the world those three seals knew that something was coming. He was sure they had not seen him. Then he remembered what his father had told him one day, "Seals will hear better through ice or through water than through air." He had pushed a block of ice out of his way as he crawled along. The sound of the fall had reached the keen ears of the seals and away they had gone. Kah-da was learning something every day.

He climbed to the top of a small iceberg and looked for a seal. Nothing was in sight. He could well understand it. The sky was now cloudy, and a cold, damp wind was blowing across the ice field. Far away he could see a team of dogs working south. His father was returning home to his tent.

Kah-da arrived with his one seal. His father had killed three! One was already skinned. Kah-da knew by the smell that supper was nearly ready. It was seal's ribs—delicious!

## Have You Read Carefully?

If you have read this part of the story carefully, you will be able to answer the following questions :

1. Why is it hard to kill three seals at one hole in the ice ?

2. Why did Kah-da tie the dogs and tell them to keep quiet?

3. Why did he not use his screen when he was creeping over the ice ?

4. What things made it very uncomfortable to crawl over the ice ?

5. What difficult thing was Kah-da hoping to do ?

6. Why did he blow down the barrel of his rifle?

7. What did he find when he looked for the seals ?

8. How had the seals known that Kah-da was coming ?

9. Why could he no longer find any seals on the ice ?

10. How many seals had Kah-da and his father killed that day ?

11. What did Kah-da have for supper?

### III. KAH-DA HAS A NARROW ESCAPE

The next morning Kah-da and his father were away together. Within an hour Father saw a seal so large that he thought it must be a square flipper, the most valuable of all seals. After hitching their dogs, they started over the sea ice. They tried not to be seen. Kah-da's father was always the teacher, as every Eskimo father is. He stayed behind and watched every move his son made.

Kah-da dropped down on his hands and knees. He hid behind the screen and began to





crawl, pushing sled, rifle, and screen ahead of him. Whenever the seal lifted his head, Kah-da stopped crawling and waited patiently for him to go to sleep again. In a few minutes Kah-da was within fifty yards. Taking careful aim through the hole in the screen, he fired. The seal rolled toward the hole, stopped, and moved again.

Kah-da jumped to his feet and ran as hard as he could. Just as he reached the hole the seal plunged in head first. Kah-da grabbed him by the hind flipper. He knew he could not hold him long with his hands, so he caught the toes with his teeth and held on for dear life. His head was almost in the hole. When an Eskimo needs more strength he always uses his strong white teeth. They are used like a third hand and help him out of many hard places.

The seal tried to free himself. Kah-da's nose would have been pulled under the water if Father had not run to help him. He came just when Kah-da was about to give up and let go. Together they dragged the seal up out of the hole to the ice.

He was good food for themselves and the dogs. The skin could be used for boots, coat, tent, boat, or bags. It could be cut up into strong rope or made into dog harness. Sealskin is used for more things in the North than any other skin.

Kah-da killed six seals this second day. Within a week he and his father had so many that they decided to start for home. The snow was rapidly leaving the ground. It would be hard to reach home over the big hill.

In this part of Greenland the sea ice in late May is always unsafe. The sun's rays are warm now, and the tall black cliffs keep off the cold winds from the north. The Eskimos know all about such things.

Kah-da came slowly down the valley to the sea ice. He saw the dark color of the ice to the south. It was so thin that the snow on top of it was soaking up the sea water through the ice.

But he started out boldly, for he knew the water was shallow. Imagine his surprise when one of his dogs pushed his foot right through the ice! Kah-da threw himself full length and face down on his sledge to spread out his weight.



Kah-da grabbed the seal





by the hind flipper

He yelled to his dogs to hurry. He knew that a sledge going rapidly will cross thin ice. As the dogs dashed on, foot after foot pushed through. The dogs pulled toward the white spots. There the snow was dry and the ice was thicker. In a few minutes they were safe.

Father, a half mile behind, saw the zigzag of Kah-da's dogs. He followed the shore ice all the way, but his eye was always on the boy. He was ready to help him if he needed it. A sledge loaded with wet sealskins is a very hard thing to pull out of water. Eight dogs in a small hole can easily drown one another. It is a very bad thing.

Father joined Kah-da a mile or so beyond. He warned him against taking such chances.

With their heavy loads it was a long, hard pull up the hill, but they finally reached the top. At the top of the hill above the village they let the dogs loose. Away they went with wagging tails. They were as glad to get back home as the Eskimos themselves.

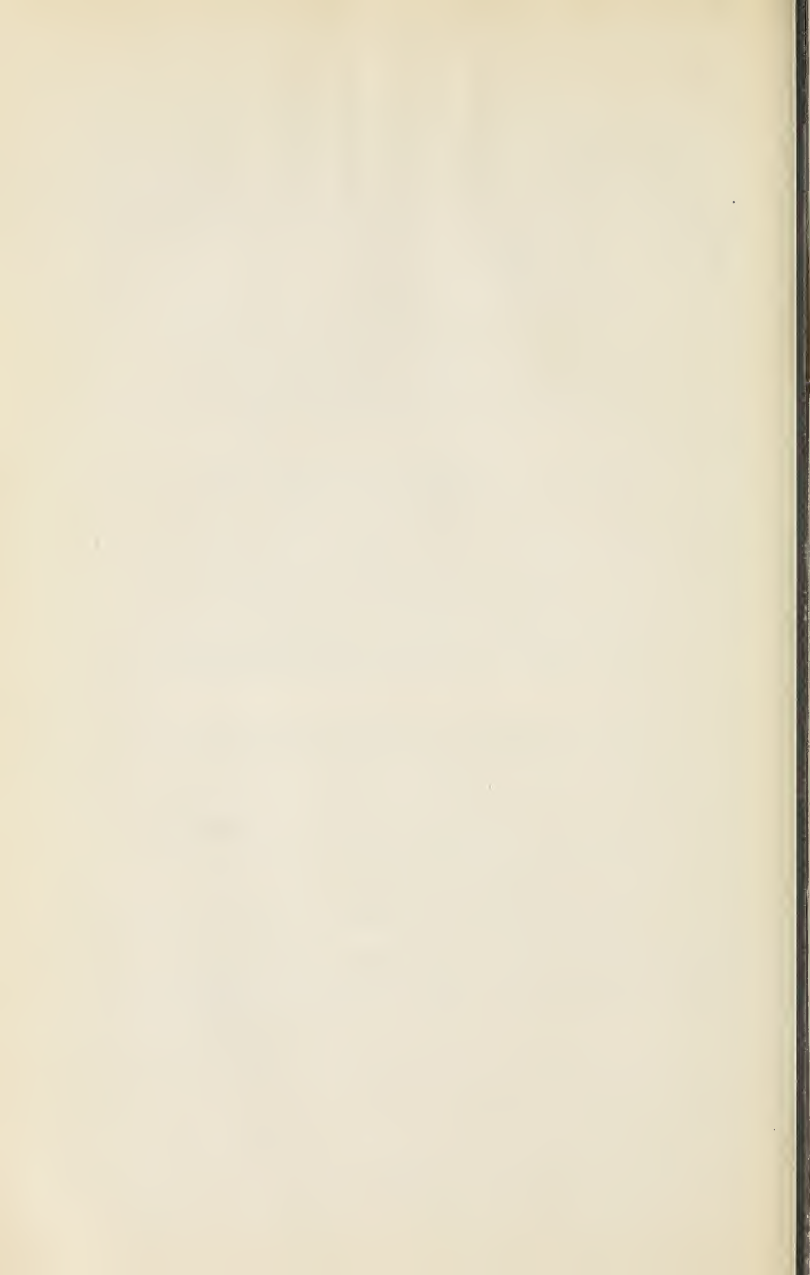
*Donald Baxter MacMillan*



### Can You Do This Test?

The following test asks questions about the last part of the story. You can answer these questions in a few words.

1. Who had taught Kah-da to catch seal?
2. What kind of seal is most valuable?
3. How close did Kah-da get before he tried to shoot?
4. What does a seal try to do when it has been shot?
5. How did Kah-da hold the seal?
6. Name seven uses for the seal.
7. How many seals did Kah-da get the second day?
8. Why would it be hard to go home over the hill?
9. Why was it dangerous to go over thin ice?
10. What color was the thin ice?
11. What did Kah-da know about the water that made him risk going over the thin ice?
12. Why did he make the dogs go faster?



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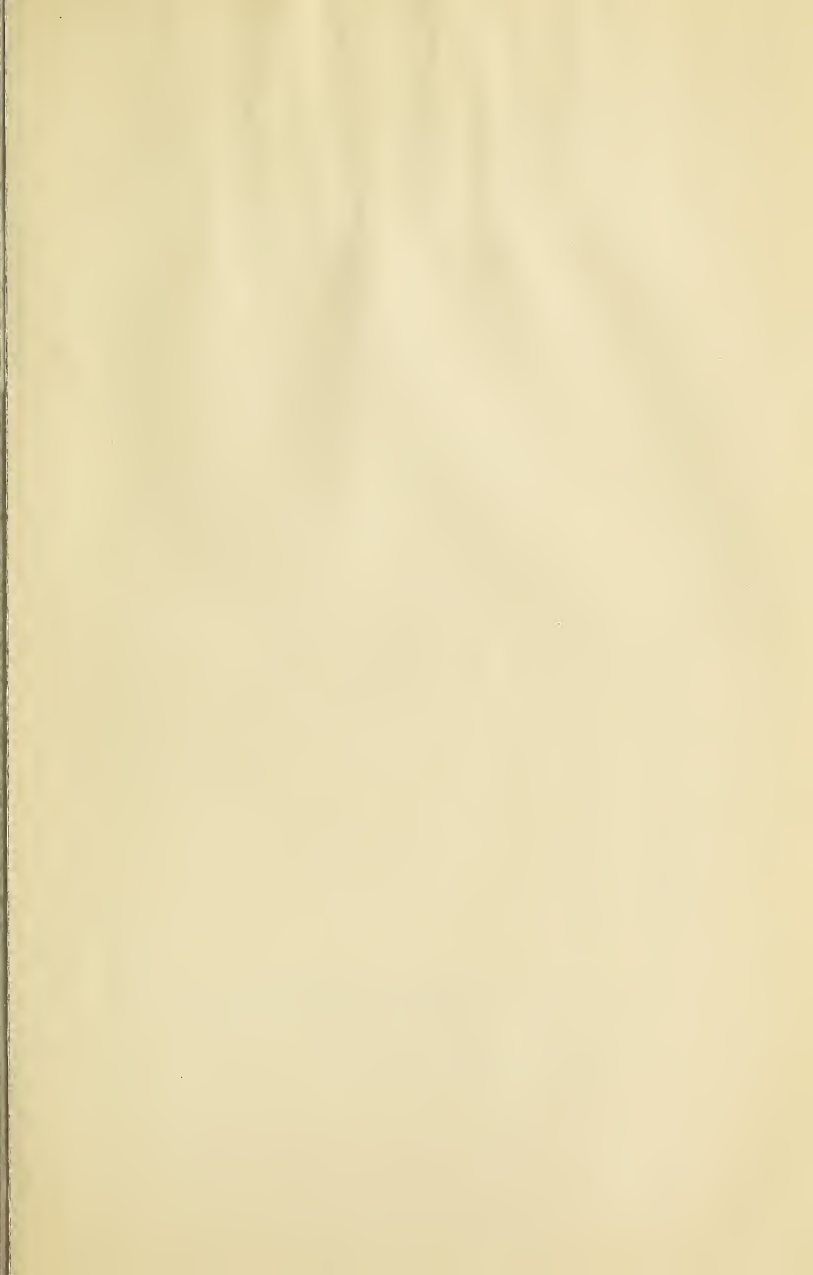
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